REPORT OF THE COMMITTEE

FOR THE

Protection of the Village Oil Industry in Bombay Province

सत्यमेव जयते

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CHAPTER I.

INTRODUCTION

1. Our Committee was constituted by Government Resolution, Revenue Department, No. 10259/45, dated 29th October, 1948, which is reproduced below :

"With a view to bring about decentralization of industries, greater utilization of raw materials and their processing in the rural areas in which they are produced, rehabilitation of hereditary village artisans, liquidation of seasonal rural unemployment, diversification of rural occupations and increase in rural incomes, Government has already undertaken various measures to promote and aid village industries for instance, subsidies, loans, assistance in organization of industrial effort on co-operative lines, technical advice as far as may be possible from time to time, etc. Government now desires to take a review of the assistance so far rendered in some typical major cottage industries and to see whether it has been adquate or whether any further assistance is required in the nature of protection against competition from large-scale industrial enterprise in deserving cases. Government is, therefore, pleased to appoint the following committee to examine this question in respect of the ghani oil crushing industry in the first instance and to submit their recommendations as early as possible indicating whether the assistance so far given is adequate and if not, what other assistance they would recommend, *inter alia*, protection from large-scale enterprise. The committee will consist of the following three gentlmen :—

(1) Mr. L. M. Nadkarni, I. C. S.
Private Secretary to His Excellency
the Governor of Bombay Chairman.

(2) Mr. Laxmidas Purshottam Ashar,
Harijan Ashram, Sabarmati.

(3) Mr. R. G. Kakade,
Servants of India Society.

Government is also pleased to direct that Mr. L. M. Nadkarni, I.C.S. should act as Chairman of the Committee in addition to his present duties as Private Secretary to His Excellency the Governor of Bombay.

Mr. Y. G. Dharmadhikari, Personal Assistant to the Joint Registrar for Industrial Co-operatives and Village Industries will work as Secretary to the Committee while Mr. J. N, Shapoorji

Personal Assistant to the Private Secretary to the Governor as Stenographer."

2. Very soon after the receipt of the Resolution we held two preliminary meetings to decide a tentative time-table, the lines of enquiry and the substance of the questionnaires which were to be sent to different officers, industrial interests, institutions economists, etc. The Government Resolution expected that we should be able to send our report "as early as possible". We interpreted this to mean within a duration of three to six months from the date of appointment of the Committee. As it was not possible for us to survey the structure and conditions of working of the ghani and the mill oil crushing industry over a wide expanse of nearly 23 districts in the Province within this short duration, we had perforce to depend on local officers to give us detailed information with the aid of questionnaires. Accordingly we asked Mamlatdars of talukas to supply the requisite information detailing the items on which it was needed We also asked the Collectors to give us the benefit of their survey of the conditions in their districts. In addition, we sent a general questionnaire omitting statistical details to prominent persons who were known to be interested in the ghani oil crushing industry, the Director of Industries and the Joint Registrar for Industrial Co-operatives and Village Industries and to institutions like the Village Industries Committee, Bombay Province, Bombay Provincial Industrial Co-operative Association and a few economists, viz. Professor D. R. Gadgil, Sir Manilal Nanavati, Professor M. L. Dantwala, and Principal D. G. Karve. These questionnaires and the reply which was received from Principal D. G. Karve are entered in Appendix 'A'. Sir Manilal Nanavati and Professor Dantwala will excuse us for not reproducing their short replies for which we are all the same thankful. Professor Gadgil presumably could spare no time to give us the benefit of his views which might have been valuable. Unfortunately, some of the Mamlatdars were not able to send us replies, but a majority of them obviously took considerable pains in collecting material and complying with our request. We appreciate their good work in this respect, especially when they are already saddled with many other onerous duties of routine administration. We had asked them to consult leaders of the public in their talukas and others who are interested in the welfare of the village cottage industries before submitting their replies and we presume that they have done this. Collectors were presumably very busy with other pressing work and though some of them supplied us some information others had no time to do so.

3. We are grateful to the following representatives of the ghani oil industry with whom we had an instructive conversation.

1. V. V. Dastane, Esquire,
Bhusaval, District East Khandesh,
2. Ratiram Narayandas Madhekar, Esquire,
Oil Merchant, Sholapur,

3. Tatya Saheb Gurjar, B.A. LL.B.,
Pleader, Pandharpur,

4. Balvant Bandoba Bedre, Esquire,
Charegaon, Taluka : Karad, District : Satara,

5. N. G. Vatharkar, Esquire,
Chairman, Pandharpur Teli Samaj Utpadak Sahakari Mandali, Pandharpur,

6. Narayan Kondaji Kahane, Esquire,
Chairman,
Khed Taluka Oilmen's Co-operative Producers' Society, Poona,

7. R. R. Kale, Esquire,
Secretary,
Provincial Teli Association,
Kurla,

8. Ravjibhai Nathabhai Patel, Esquire,
Bhaleda, Sojitra, *via* Anand, District : Kaira,

9. H. I. Hattivale, Esquire, M.L.A.,
Oilman and General Merchant,
Bijapur,

10. M. B. Kulkarni, Esquire,
Manager, Veer Shiv Lingayat Teli Samaj
Co-operative Producers' Society,
Charegaon, District : Satara.

4. We had the benefit of a short but interesting talk with Mr. Zaverbhai Patel, Member of the Sub Committee of the Indian Oilseeds Committee, when he came to this Province regarding the village oil industry for which our thanks are due to him.

5. We are grateful to Mr. S. M. Dahanukar of the Amrut oil Mills Ltd., and Mr. S. R. Raja of the Raja Oil Mills for the candid information which they supplied, much of which might have remain-

ed a mystery to us as we were not hitherto initiated into the esoterics of the oil trade.

6. We also thank the Managers of the G. I. P. and the B. B. & C. I. Railways for promptly supplying us details of the freight charges in respect of oil seeds, edible oils and oil cakes. Our thanks are also due to the Director, Bureau of Economics and Statistics, the Director of Agriculture, the Director of Industries and the Joint Registrar for Industrial Co-operatives and Village Industries for the information which they supplied.

7. With the co-operation of all concerned, luckily our Committee has been able to adhere to the time limit which we imposed upon ourselves and we are able to submit our report to Government within six months which we set before ourselves as our goal.

8. We also place on record our appreciation of the good work done by the Secretary of our Committee, Mr. Y. G. Dharmadhikari in visiting different centres of the oil ghani and oil mill industry in the mofussil and Bombay City from time to time and in bringing us valuable information. Messrs. J. N. Shapoorji and G. P. Nadkarni, Stenographers attached to the Private Secretary to His Excellency the Governor helped the Committee with typing and despatch work in the earlier stages and Mr D. H. Joshi, who took over their work, has also given a good account of his conscientious labour.

9. We referred to the following publications with profit :—

(1) The Oil-seeds trade of India : by Mr. J. C. Bahl ;

(2) The Vegetable Oil Industry in the Bombay Presidency : by Mr. A. F. Yuill ;

(3) Report on the marketing of groundnuts in India and Burma ;

(4) Report of the Cottage and Small-scale Industries Sub-Committee of the Provincial Industries Committee, Bombay ;

(5) Report of the Food and Forest Industries Sub-Committee of the Provincial Industries Committee, Bombay ;

(6) The First Annual Report of the Indian Oilseeds Committee for the year ending March 31, 1948 ;

(7) Cottage Industries of India by Mr. V. R. Chitra ;

(8) Rural and Cottage Industries—Report of the National Planning Committee;

(9) Oil extraction—by Mr. Zaverbhai Patel;

(10) Report of the Government of India Panel on oils and soap.

CHAPTER II.

THE PROBLEM.

10. Before we proceed to analyse the difficulties which have hamstrung the progress of the ghani oil crushing industry in this Province, we feel that a brief statistical survey of the conditions which obtain at present will be both instructive and interesting. The information pertains to a few talukas and a few concerns in Bombay City and is not fully exhaustive. All the same the tables we give below will help Government to visualise at a glance the picture of both large scale and small scale production of oil and its products in this Province.

(Please see next page).

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INFORMATION REGARDING THE WORKING OF OIL GHANIS.

Division	Dist.	Taluka	No. of telis	No. of ghanis	Source of income apart from oil business	No. of hrs. a ghani is worked per day	Operative No. of days in a year	Variety of seeds crushed per day	Average annual profit (+) or loss (—) per ghani	Remarks
1	2	3	4	5	6	7	8	9	10	11
NORTHERN	*Ahmedabad*	Sanand	10	10	9 in agr. & labour Rs. 500 per head	6	275	2 local maunds of either sesamum or castor	Rs. + 100	
		Prantij	25	25	—	6	180	25 srs. of sesamum	—	
	Kaira	Matar	30	30	11 in agr. Rs. 450 per head	6	275	1½ maund sesamum & 2½ maund castor	—	
		Anand	120	120	84 in agr. & small business	6	120	½ to 1 maund per day of sesamum	—	
		Borsad	147	109	75 in agr. and labour Rs. 200 per head	4	120	80 srs. of seamum and 80 srs. of castor	—	
		Thasra	60	60	Agr. & petty shops: Rs. 800 per head	6	—	2 mds. of sesamum 2 mds. castorseed	—	Sufficient to maintain themselves.
	Panchmahals	Godhra	23	23	6 in agr: Rs. 200 per head	8	260	1 Bengali md. sesamum, castor and linseed, each	+ 543	
		Dohad	43	43	All dependent on oil crushing	12	200	1½ mds. gr. nut	+ 500	
		Halol	50	10	25 in agr: Rs. 400 per head	8	300	1md. of sesamum		Ghanis are run for hire, viz., labour charges only.

	Limakheda	60	60	45 in agr: Rs. 500 per head	10	180	64 kacha srs. gr.nut, sesamum, linseed, rapeseed, and mustard [castor (48 srs).]		
Broach	Hansot	20	20	Agrl. and business: Rs. 300 to 800 p. head	7	160	30 srs. sesamum	+Rs. 200 to Rs. 400	
	Ankleshwar	40	40	Some in agr: Income Rs. 200 per head	8	270	30 srs. sesamum and castor oil.	—	Somehow they make both ends meet.
	Amod	6	6	2 in agr. Rs. 400 per head	6	300	30 srs. castor and 30 srs. seasamum	+1,000	
Surat	Mandvi	10	10	8 in agr. & business	8	240	2 mds. sesamum or castor.	+Rs. 80	
	Chorashi	40	40	5 in agr. & pretty shops: Rs. 300 to 400.	9 to 10	270	20 srs. sesamum.	—	It is presumed that oilmen mix groundnut oil to make both ends meet.
	Bardoli	70	40	50 shops and farming Rs. 1,200 per head.	5	200	15 srs sesamum; 12½ " castor.	—	
	Valod	8	8	Agr. and petty shop keepers (3): Rs. 500.	8	270	1 md. sesamum.	+1240	
Thana	Dahanu	4	4	Agr. & tonga hire:	4	180	15 srs	—	
	Umbergaon	3	3	Agr: Rs. 333 p. head.	4	180	22½ srs. of niger	+218	
	Murbad	87	87	All in agr. & groceries shop: Rs. 100 to Rs. 1,000 p. head	4	120	7 srs. of sesamum niger mhowra seeds.	—	
	Shahapur.	23	23	All in agr.: Rs. 250 per head.	5	75	5 srs of mothi	—	

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1	2	3	4	5	6	7	8	9	10	11
	Banaskantha	Vadgaom	71	71	All in agr. & other business: Rs. 500 each	5	180	40 srs. per day sesamum & castor.	4+ 58	
		Danta	28	28	26 in grocery, cartmen & agr:	6 to 8.	180	30 srs. sesamum & rapeseed.	+200	
		Dhamra	50	50	All in Agr: Rs. 200 per head.	2	120	15 srs. of castor & sesamum *each.*	—	
	Sabarkhantha	Jadar	60	60	35 in trade and agr. Rs. 700 each	7	180	1½ mds. to 2 mds, kacha, sesamum, rapeseed & castor.	—	Just sufficient to maintain their families, each teli earning Rs. 500 per year.
		Bayad	61	61	29 in agr, 18 in cartmen, 5 miscellaneous business: Rs. 200 to Rs. 600.	4	200	10 srs. sesamum & castor each: groundnut & Sarsu 2 srs. each.	—	Ghanis are worked for labour charges.
		Meghraj	100	100	All in agr. & cart loading Rs. 500 each.	6	90	7½ srs. sesamum, rape and safflower	+200	
		Mohanpur	80	80	15 in agr. & transport Rs. 250 to Rs. 400 each.	6	120	24 srs. groundnut, sesamum & castor.	—	Ghanis are worked for labour charges.

CENTRAL

West Khandesh	Shirpur	13	13	All. in agr. & labour: Rs. 500 each	8	120	15 srs. of gr. nut	—*	*No ascertainable profit. Ghanis are worked at Rs. 4-8 per Bengali md. by way of crushing charges.
	Taloda	350	7	300 in agr: They earn enough for livelihood	6	240	40 srs. gr. nut.	+400	
	Dhulia	17	17	Some in agr: Rs. 500 each.	—	—	— —	+500	
Sholapur	Sholapur	108	120	All dependant on ghanis.	10	300	30 srs. oil of gr. nut & 60 srs. safflower.	—	Not ascertainabe.
	South Sholapur	35	40	34 in agr: Rs. 200 each.	8	60	64 srs. of gr.nut and kardi each.	+100	
	Barsi	735	237	571 in agr: Rs. 200 each.	7 to 8	305	80 srs. gr.nut & 220 srs. safflower.	—	
	Mohol	53	142	31 in agr. & trade: Rs. 500 to Rs. 1,000 each.	8	240	80 srs. of gr.nut & safflower each	+270	
	Madha	350	150	125 in agr: Rs. 50 each.	8	305	72 srs. of gr.nut 240 srs. of safflower.	+125	
	Karmala	98	185	27 in agr. & kirana business: Rs. 250 each	8	150	80 srs. gr.nut & 240 srs. of safflower.	—	
	Pandharpur	74	130	22 in agr. & kirana shops: Rs. 1,000 each.	8	245	2 mds gr. nut & safflower 6 mds.	—	
	Sangola	260	50	145 in agr: Income just sufficient for livelihood	8	—	36 srs. safflower 25 srs. karanji.	—	
	Malsiras	39	69	11 in agr: Rs. 125 each.	8	—	¾ bag gr.nut; 2½'' safflower;	—	Profit just sufficient to maintain themselves.

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1	2	3	4	5	6	7	8	9	10	11
CENTRAL										
	East Khandesh	Yawal	150	150	20 in agr. labour & groceries; 250 each.	8 to 10	300	60 srs. gr.nut	—	3 telis have made profits of Rs. 600, Rs. 500 & Rs. 1,375.
		Raver	404	95	309 in agr. labour: Rs. 100 each.	8	240	1 md. gr.nut	—	
	Ahmednagar	Akola	140	100	All in agr., grocery shops, etc. Rs. 200 to Rs. 500 each	4 to 6	180 to 240	40 srs. gr. nut 50 srs. niger & safflower.	+250	
		Sangamner.	45	50	36 in agr. & grocery Rs. 150 each	11	280	35 sesamum & gr. nut and 75 safflower.	+250 to 300	
		Shrirampur	45	69	—	6	250	80 srs. gr. nut 224 srs. safflower.	+725	
		Rahuri	132	109	23 in a gr. Rs. 1300 each	10	270	Safflower & groundnut	—	Two telis have incurred a loss of Rs. 365 & 95 and 2 a profit of Rs. 768 and Rs. 659.
		Newasa	134	36	120 in agr. & business Rs. 55 each.	8	240	120 srs. safflower	+472	
		Karjat	65	70		6 to 8	150	40 srs. gr. nut & 2 bags of safflower .	+150	

	Jamkhed	100	60		8	240	30 srs. gr. nut 40 srs. safflower.		
	Shevgaon	228	76	120 in agr. labour Rs. 157 each	6	188	gr. nut, sesamum & safflower.	+ 1232	
	Shrigonda	62	78	—		—	—	—	
Satara.	Koregaon	67	69	552 Agrl. Rs. 100 to 150 per head.	6	240	11½ seers groundnut	+ 55	
	Tasgaon	90	95	42 Agri. Rs. 380 per head	6 to 8	180	50 seers groundnut 80 seers safflower.	+ 28 per teli.	
	Walva	217	217	All are fully dependent on agriculture.	8	180	50 seers of groundnut	+ 299 per ghani.	
East Khandesh.	Bhusawal	40	40	nil	7 to 12	276	50 seers of groundnut		
	Edlabad	25	20	15 Agriculture: Rs. 200 per head.	10	180	60 seers	+ 173 per teli.	
	Chopda	74	74	24 agriculture Rs. 50 per head.	8	9 months	30 seers ordy. ghani 60 seers Wardha ghani	+ 750 per teli.	
Poona.	Indapur	304	98 (2 Wardha type)	54 agriculture	8	8 months	40 seers	+ 610 per ghani	
	Dhond	275	30	160 in agrl. Rs. 300 per head per annum.	8	180	120 seers	+ 1500**	**It is not clear whether this is the profit for one ghani or all ghanis

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1	2	3	4	5	6	7	8	9	10	11
		Khed	90	90	20-In agrl., grocery or cartmen: R. 1,000 each.	10	207	50 seers Khorasani 50 seers gr. nut	+777 *1 per ghani.	*1—This does not include information for one teli.
		Sirur	125	125	All are dependent on oil business.	8		25 seers of groundnut oil & 45 seers of oil of safflower.		The telis somehow maintain themselves on the business. No profit figures available.
	Nasik	Baglan	38	16	5 in agrl. Rs. 564 per head	8	162	33 srs. gr. nut 33 srs. til 13 srs. castor 36 srs. niger.		—do— —do—
		Dindori	200	50	150 in agrl. & groceries: Rs. 300 per head.	10	60 to 90 days	30 seers niger	+120 per ghani.	
		Niphad	156	29	154 in agrl. & trade Rs. 1000 each.	8	300	20 srs. gr.-nut 20 srs. Safflower	+Rs. 597 per ghani	
		Chandor	650	22 (2 are Haskell)	510 are in agrl. or other trades.	8	277	32 srs. gr. nut.		
SOUTHERN	*Ratnagiri*	Malwan	69	76	69, agrl. cartmen & labourers. Rs. 350 per head.	4	50	25 srs. sesamum 28 srs. copra.	+Rs. 27 per ghani	

SOUTHERN	Vengurla	541	47	466 labourers & agriculturists.	5	75	90	srs. copra.		
	Kankavli	20	20	20 agrl. & trade	9	20	32	srs. niger		**No profit figures are ascertainable.**
	Ratnagiri	112	112	112 agrl. Income sufficient for maintenance.	2	60	25	*lbs.* sesamum	—	
	Sanga-meshwar	150	150	150 Agrl. or labourers Rs. 300 per head.	8	40	12	paylees sesamum	—15	
	Guhagad	520	65	520 agrl. & labourers; Rs. 400 to Rs. 500 per head.	3	—	—	—	—	
	Chiplun	351	52	292 agrl., service or business: Rs. 2500 income per head	6	180	21	srs. gr. nut	+57	
	Dapoli	46	46	46 agrl. income sufficient for maintenance.	6	120	18	srs. niger.		
	Khed	23	23	23 agrl. & labour. Rs. 282 per head.	6	20	24	srs. sesamum	—	Business not carried on on a large scale; therefore no appreciable profit or loss.
	Mandangad	38	38	38 agrl. income Rs. 300 to Rs. 500.	2	30	1	—do—	—	
	Rajapur	278	200	278 agrl. & labour.	2	62	5	—do—	—	**No profits made.**
	Deogad	2232	75	All in agrl. or trade. Income Rs. 50 year	2	45	8	—do— & copra	+45	
Belgaum.	Sampgaon	84	84	All follow agrl. also: Rs. 35, p.h.	6	120	96	srs. (local) gr. nut & Safflower.	+900	

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1	2	3	4	5	6	7	8	9	10	11
		Parasgaon	100	100	50 agrl. & groceries	8	240	320 srs. of gr. nut & Safflower *each.*	+875	
		Chandgad	12	12	12 agrl. Income. Rs 500 p.h.	6	180	1 md. gr. nut	+1250 (?)	
		Chikodi	64	70	31 agrl. Rs. 140 income.	9	150	130 srs. gr. nut	+150	
		Shahpur	7	7	6 have kirana shops: Income p.h. Rs. 500.	8	150	84 srs.	+115	
	Bijapur	Indi.	25	25	25 agrl. Income Rs. 600	10	135	2 bags of safflower & 1½ bags of gr. nut.	+945	
		Sindgi	727	100	622 agr. Rs. 104 income	6	180	72 srs. gr. nut. 36 srs. safflower.	+470	
		Bijapur	132	386	5 agri. Rs. 1000 p.h. income	9-10 hrs.	276	656 srs. of safflower 356 srs. of gr. nut.	+1770 (?)	
		Bagewadi	60	64	All in agr. Income Rs. 650 p. head.	6	180	72 srs. gr. nut & 160 srs. safflower.		
		Muddebihal	55	55	All in agr. & trade Income Rs. 200 to Rs. 1000.	8	295	336 srs. gr. nut & 420 srs. Safflower	+1252 (?)	
		Badami	48	84	30 agr. 6 tobacco business:	8	300	256 srs. safflower 200 srs. gr. nut.	+500	

SOUTHERN	Bagalkot	31	31	27 agrl. Income Rs 300 p.h.	5 to 6	240	200 srs. safflower 6 bags gr. nut.	+200	
	Hungund	32	32		6	180	40 srs. gr. nut 42 srs. safflower	+500	
	Bilgi	10	10	6 agrl. Income Rs. 500	4	120	120 —do—	+500	
Dharwar.	Haveri	8	8	7 in agr. & trade; Rs. 114 per head.	8	240	160 srs. safflower	+400	
	Gadag	53	53	42 in agr. Income Rs. 250 p.h.	8	308	36 —do—	+1529 (?)	
	Navalgund	38	12	All in agr. income Rs. 600 per head.	6	180	120 —do	+320	
	Ron	27	30	All in agr.	8	120	300 —do—	+2300 (?)	
	Mundargi	12	12	9 in agr. Income Rs. 300-400 per year	8	180	312 —do—	+2750 (?)	
North Kanara	Karwar	110	110	All in agr. Income Rs. 700 per head.	6	90	56 srs. of copra	—	No ascertainable profit as it is a job work for them.
	Supa	8	8	All in agr. Income Rs. 975 p.a.	5 ;	10	44 ,, ,,	—	—do— —do—
	Kumta	78	9	All in agr. Income Rs. 200 p.a.	4	90	10 ,, ,,	—	—do— —do—
	Bhatkal	20	20	All agr. or labour Rs. 200 p.a.	5	30	48 ,, ,,	—	—do— —do—

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1	2	3	4	5	6	7	8	9	10	11
SOUTHERN	*Kolaba.*	Pen	8	14	—	8	147	84 srs. gr. nut	—	No ascertainable profits as no accounts are maintained.
		Karjat	2	2	Both in agr. Income Rs. 400 p.a.	4	216	—	—	
		Roha	13	13	All in agr. Income Rs. 384 p.a.	10 to 12	75	3 srs. of sesamum	+62	
		Mangaon	48	48	All in agr. Rs. 193 p. head.	6	120	4 srs. of sesamum	—	
		Poladpur	6	6	All in agr. Rs. 200 p.h.		40	10 ,, ,,	—	
		Murud	3	3	—	9	120	3½ ,, ,,	—	Sufficient to maintain themselves.
		Mhasla	18	18	All in agr. Income just sufficient to maintain themselves.	8	30	1½ maunds ,,	—	
		Shrivardhan	15	15	All in agr. and carpentry.	—	60	4 paylis ,,	—	All ghanis worked for wages only.
		Panvel	402	57	285 in agrl. labour & retail trade.	8	180	80 srs. ,,	—	

INFORMATON REGARDING THE WORKING OF EXPELLERS, ROTARY GHANIS AND HYDRAULIC PRESSES, WORKED ON POWER.

Division. 1	District. 2	Taluka. 3	No. of expellers, rotaries or hydraulic presses. 4	No. of labourers. 5	Daily wage rate. 6	No. of hours a mill works per day. 7	Operative No. of days a year. 8	Crushing capacity per day. 9	Fixed capital. 10	Capital for purchase of seeds. 11	Average annual profit (+) or loss (—) 12	Remarks. 13
					Rs. As.							
	Ahmednagar	Akola	(1) 4 rotaries	4	2-0	8	180 to 240	7 bags gr.nut 6 bags niger.	17,000	7,000	+	Approximately.
			(2) 2 ,,	3	1-8	8	180 to	5 bags niger	19,000	5,000	+	
		Sangamner	4 ,,	4	1-8	8	275	24 mds.	18,000	28,000	+	
			2 ,,	3	1-8	8	180 240	12 mds.	9,000	17,000	+	
			4 ,,	4	1-8	8	250	24 mds.	20,000	19,000	+	
			2 ,,	4	1-8	8	100	12 mds.	10,000	1,025	—	Loss.
		Jamkhed	1 ,,	4	1-0	3	90	10 pylis gr. nut & 10 of safflower	10,000	1,800	+	No loss.
			1 ,,	2	1-0	4	90	5 mds. gr. nut. & 12 mds. safflower	3,000	700	+	No loss.
	East Khandesh	Yawal	4 expellers	76	0-15-0	8 to 12	204	325 mds. gr. nut.	35,600	1,391,000	+	
			3 ,,	32	2- 0-0	16 to 24	146	196 mds. gr. nut.	97,595	192,350	+	
			2 ,,	18	2- 0-0	12 to 16	150		13,600	400,000	+	

Division. 1	District. 2	Taluka. 3	No. of expellers, rotaries or hydraulic presses. 4	No. of labourers. 5	Daily wage rate. 6	No. of hours a mill works per day. 7	Operative No. of days a year. 8	Crushing capacity per day. 9	Fixed capital. 10	Capital for purchase of seeds. 11	Average profit (+) or loss (—) 12	Remarks. 13
	East Khandesh—Contd.				Rs. As.							
		Raver	3 Expellers	—	1-8-0	24	130	273 mds. gr. nut.	101,084	712,939	+	
		Bhusawal	7 ,,	85	1-0	8	130	350 mds. gr. nut.	450,793	769,923	—*	
			3 ,,	62	1-1	12	159	450 bags	76,463	878,661	+	
		Chopda	(1) 2 ,, 3 rotaries	34	1-6	16	204	150 mds.	91,170	526,500	+	
			(2) 12 rotaries	29	1-8	12	160	47 mds.	61,712	165,000	+	
		Pachora	23 expellers	125	1-11	24	180	2,700 mds. gr. nut. 130 mds. til seed.		**		
	Nasik											
		Baglan	4 Rotaries	19	1-4	16	292	34	62,520	130,798	—	
		Dindori	2 ,,	2	1-6	8	150	42 pailies of niger	12,000	—	+	
			5 ,,	5	1-6	8	300	256 pailis of nigar	35,000	—	+†1	
	Satara.											
		Tasgaon	(1) 1 Expeller 2 Rotaries	8	1-4	4	180 to 240	10 mds. of	75,000	50,000	—††2.	

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*Loss is due to want of raw materials, diesel oil and transport facilities on account of which the mill worked for 130 days.

**This is a section of a concern which carries on several activities & hence no separate figures are given for the last 3 columns

†1. The mill works flour mills also.

††2. No balance sheet prepared this being the first year.

Man	4 Rotaries	4	1-8	8	216	—	11,100	500	+500	The oilmills crush karanji seeds by accepting labour charges only.
Sholapur.										
Sholapur	5 Expellers	24	1-10	24	10	113 bags	266,031	56,800	—	The mill is working for the last 2 months only.
	2 ,,	8	3-0	8	297	50 bags	40,000	—	+	
Barsi	2 ,,	24	1-8	16	120	180 mds.	28,338	4,460	+	
	3 ,,	43	1-6	22	82	600 mds.	85,981	1,105,208	+	
West Khandesh										
Dhulia	1 Hyd. press 3 Expellers	15 to 25	3-0	8	180	—	60,000	500 per day	+ +	
Sind-kheda	4 Expellers	100	2-0	8	200	450 mds.	155,000	2,200,000	+	
Sirpur	2 ,,	46	1-10	8	100	235 mds.	160,000	343,500	*	*Being newly started, there is neither profit nor loss.
Sharda	8 Rot. ghanis	12	1-12	11	187	75 mds.	69,000	80,000	+	
	4 ,,	99	1-12	16	190	62 mds. (Bengali)	27,000	864,000		*Loss.*
Nandur-bar	4 ,,	36	2-0	8	200	120 mds. gr. nut 80 mds. castor	—	—	+	
	1 Hydr. press 2 Expellers									
	2 Expellers 12 Rotaries.	21	1-8	10½	250	125 mds.	377,000	1,061,000	+	

Division. 1	District. 2	Taluka. 3	No. of expellers, rotaries or hydraulic presses. 4	No. of labourers. 5	Daily wage rate. 6	No. of hours a mill works per day. 7	Operative No. of days a year. 8	Crushing capacity per day. 9	Fixed capital. 10	Capital for purchase of seeds. 11	Average annual profit (+) or loss (—) 12	Remarks. 13
	Nandurbar—Contd.		2 Expellers	85	1-6	8	275	70 mds. gr. nut 55 mds. castor.	175,000	200,000	+	
THERN	*Ratnagiri*	Malwan	1 Rotary ghani	8	1-8	—	70	20 srs. copra	200		+	
		Chiplun	1 ,, 2 Hyd. presses	12	1-4	8	150	20 mds. gr. nut	100,000	320,000	+	
		Dapoli	1 Rotary ghani	1	2-0	—	90	3 pylis niger	800	—	*	*No separate figures can be given as the mill does grinding work also.
		Rajapur	1	8	2-0	1½	60	—	7,900		**	**Mill does the work of crushing on payment of crushing charges.
	Belgaum	Bail-hongal	3 Expellers	40	2-8	16	275	346 mds. of 28 lbs. each	200,000	500.000		Profit position not known as accounts have not yet been made up.
		Chikodi	1	10	1-8	8	120	20 bags. gr. nut	65,000	—	+	

Kolaba											
	Panvel	2 Expellers	16	1-8	8	207	8½ mds. gr. nut	99,828	253,905	—	No profits drawn up.
	Alibag	? Rotary ghanis	4	1-12	9	50	3 khandis per day	20,000	—	—	* *Mill also works as a rice mill: loss due to reported competition from Poona & Bombay markets.
Dharwar											
	Haveri	2 Expellers	20	1-8	8	200	5 tons gr. nut	120,000	204.143		No separate profits are ascertainable as the mill forms part of a concern.
	Byadgi	4 ,,	68	2-10	8	250	265 mds.	260,000	300,000	—	Profit not yet ascertained.
	Gadag	1 ,,	17	0-13	8	126	180 mds.	40,872	—	+	Three other mills at Gadag have made losses.
	Ron	2 ,,	31	0-15	8	150	105 mds.	61,989	412,351	+	
	Mundargi	2 Rotaries	11	1-15	8	270	8 bags gr nut.	14,477	42,660	+	
		1 Expeller	15	1-0	8	186	33 bags gr. nut.	51,817	363,988	+	
HERN											
Ahmedabad.											
	Prantij	7 Expellers	75	2-0	24	240	1,000 mds.	320,000	7,290,000		Balance sheet could not be obtained.
Kaira											
	Thasra	2 Expellers	16	1-8	8	317	80 mds. gr. nut 60 mds. castor	150,000	200,000	—	As the mill has been recently constructed.
Panchmahals											
	Godhra	3 Expellers	40	1-4	24	180	320 mds. gr. nut	125,000	150,000	+	
		2 ,,	30	1-6	24	150	350 mds. gr. nut 200 mds. doli,	108,000	841,000	+	

District. 2	Taluka. 3	No. of expellers, rotaries or hydraulic presses. 4	No. of labourers. 5	Daily wage rate. 6	No. of hours a mill works per day. 7	Operative No. of days a year. 8	Crushing capacity per day. 9	Fixed capital. 10	Capital for purchase of seeds. 11	Average annual profit (+) or loss (—) 12	Remarks. 13
	Godhra—contd.	1 ,,	24	1-6	24	250	131 mds. gr. nut 140 mds. doli & 145 mds. of castor	37,500	300,000	+	
	Dohad	Expellers	75	1-14	24	150	600 mds. gr. nut; 350 mds. castor	250,000	500,000	—	Loss pertains to the year 1946-47.
		2 ,,	20	1-12	24	240	300 mds. gr. nut; castor 240 mds.	80,000	845,000	+	
	Halol	12 Rotary ghanis	10	1-6	12		120 mds. gr. nut	100,000	50,000	—	
Broach.	Amod	2 Rotary ghanis	2	2-0	2 to 3	300	1 md. sesamum	2,500	100	+	
		1 ,,	3	3-0	—do—	300	1 md. sesamum	1,500	100	+	Owner crushes oilseeds of others on payment of crushing charges.
		2 ,,	1	1-0	270		1 Bn. md. sesamum		—	+	
Surat	Valod	2 Rotary ghanis	2	1-0	3	—	69 Bengali mds. sesamum		2,375	+	
									840	—	The mill crushes seeds belonging to others on payment of crushing charges.
		3 ,,	2	1-0	—	—	—	2,300			
									750	—	
		2 ,,	2	1-0	—	—	—	1,700		—	

Surat—Contd.									
Pardi	7 ,,	8	310	8	260	52 mds. niger	34,000	—	+
	2 ,,	6	1-8	8	275	40 mds. niger	7,000	135,000	+
	2 ,,	1	2-0	3 to 4	25	—	1,275	1,025	—
Jalalpore	2 ,, 2 Expellers	8	1-6	8	—	120 Bengali mds. gr. nut	100,000	—	—
Dangs.									
Ahwa	2 Rotaries	2	2-0	7	300	—	—	2,000	—
Banas Kantha									
Vadgaon	2 Rotary ghanis	3	2-0	6	100	10 mds. rape seed: 8½ mds. castor.	25,000	—	—
Sabar Kantha									
Jaddar	2 Rot. ghanis	4	1-0	8	180	20 kacha mds.	20,000	3,000	+
	4 ,,	10	1-8	8	180	50 mds.	23,000	50,000	+
Malpur	4 ,,	3	2-0	8	310	20 mds.	81,800	40,000	+
Thana									
Dahanu	2 Rot. ghanis	2	1-8	8	240	6 mds. gr. nut	3,800	8,000	+
	2 ,,	2	1-4	4	240	—do—	1,600	11,000	+
Umbergaon	2 ,,	2	1-0	8	180	1½ Beng. md.	1,100	2,000	+
Bassein	1 Hyd. press	25	3-0	10	300	50bags	1,000	—	+

Division. 1	District. 2	Taluka. 3	No. of expellers, rotaries or hydraulic presses. 4	No. of labourers. 5	Daily wage rate. 6	No. of hours a mill works per day. 7	Operative No. of days a year. 8	Crushing capacity per day. 9	Fixed capital. 10	Capital for purchase of seeds. 11	Average profit (+) or loss (—) 12	Remarks. 13
Bombay City	1. A mill in Bombay		(1) 21	277	3-1	24	311	160 tons of each variety of oilseeds	357,605	17,068,469	+	
	2.	—do—	(2) —	145	2.98	7-6	277	9 tons gr. nut 107 tons copra.	77,524	5,069,307	+	
	3.	—do—	(3) 4	43	2-12	24	305	18 tons gr. nut & copra *each.*	265,672	3,603,320	+	
	4.	—do—	(4) 7	70	2-8	24	311	12 tons gr. nut 3 tons copra 9 tons linseed 1 1/3 tons kardi 1 1/3 tons sesamum	120,000	5,280,000	—	

11. It will be seen from the information tabulated above that ghanis register a considerably lower volume of intake of seeds, lower working hours per year and lower profits. The degree of profitability varies between different mills. Whereas one district mill has made as high a profit as Rs. 74,454/-, there are also some which have either to soft-pedal their business or in some cases even to close down due to competition from their colleagues either within the borders of this Province or outside. Perhaps, the reason for the widely different degree of profitablity shown by mills using identical number of units of expellers or rotaries is due to the comparatively lower efficient production and business management of those units which are less remunerative. In Kolaba district the mill employing rotary ghanis at Poyanad which started working on May 28, 1948 is reported to have incurred a loss of Rs. 2,500/- by January 1949. One of the causes which has been given is that the freight charges from up-country and Bombay comes to as much as 10 to 12 rupees per khandi of seeds. There is also considerable competition in the sale of oil cake. A very interesting account of how mills situated in States across the Provincial border are competing with mills in our Province is provided by the Managing Agent of the Ranebennur Ginning and Trading Company, which works a unit of 3 Lahore expellers. We reproduce his account verbatim so that it will give an idea of the incidence and degree of competition from mills foreign to this Province not only as far as the mills in this Province are concerned but also oil ghanis. He says "Our expllers are kept closed for the reasons explained below:

Oil production in our factory would put us to a considerable loss on account of the competitive prices for oil produced in Harihar and Davangere of the Mysore State which are within a radius of only 14 to 20 miles.

Sales tax of 6 pies per rupee is levied in our Province as against only 3 pies per rupee in the Mysore State. Besides export of groundnut seed is banned by Mysore Government as a result of which the millowners of Harihar and Davangere are getting the raw material required for oil production at much cheaper rate. To add to this, the factories in Harihar and Davangere are worked with the help of electrical energy which is supplied there at cheap rates. The fuel for our factories on this side is oil and fire-wood. The working expenses are obviously much higher here. It is observed that the charges for electrical energy for the oil factories at Davangere and Harihar are Rs. 10/- per day on an average as against the corresponding expenditure of Rs. 100/- per day for our factories worked on fire-wood. The cheaper production enables the Mysore factories to dump their oil at competitive rates, and still run profitably.

On account of such adverse factors working against us, we are forced to close down the expellers for the present rather than incur losses.

It may please be noted we had purchased 500 tons of groundnut seeds and have sold half of the quantity by exporting to Bombay. The remaining stock will be despatched to Bombay as and when we get wagons.

I may, however, appeal to Government on behalf of our own factory as well as on behalf of factories in Byadgi, Haveri, etc. to secure early supply of electrical energy from the Jog generating centre. By far this would be a most effective fillip to the local industry resulting in benefits to the factories, the Government and general public as well. Oil and groundnut cake would begin to be produced and made available locally inspite of the competition from the factories in Mysore State. The Government would have its share of income-tax. Labour in these parts will have surety of employment. On account of the closing down of oil production all these benefits are denied to the public and the Government as well. It is feared that depopulation of these parts is most likely in the near future as both labour and capital would shift to places like Davangere where industries are thriving as a result of active interest and support from Mysore Government. It is high time for our popular Government to come to the aid of the local industry with similar interest and support. The supply of electricity from the Jog generating centre to these places would surely hasten the pace of local industrialisation".

As against this, we have the instance of an oil mill in the very same district of Dharwar in the Ron taluka where a unit of two expellers working for 8 hours daily and for five or six months only has shown a profit of Rs. 74,454-7-0 in a year. In Bombay city, whereas some mills have shown losses, two mills have shown profits of Rs. 4 lakhs and Rs. 10 lakhs respectively. We understand that there is an embargo on the export of oil-seeds in Madras Province which has depressed the prices of oil-seeds there. The mills in Madras can, therefore, produce oil at much cheaper rates than those in Bombay, their crushing cost, we were told, being about Rs. 26/- to Rs. 28/- per ton of oil seeds, as against that of Rs. 30/- to Rs. 40/- for similar quantity in Bombay.

12. We have been told that the big oil mills of Bombay have not been spared competition from their prototypes in the ditricts of our Province, so that, whereas, the wholesale price in barrels of ready groundnut mill oil is Rs. 21-10-0 per quarter, up-country mill oil in tank wagons is quoted at Rs. 21-4-0 per quarter. The oil mills in the districts have a better competitive margin as compared to Bombay mills because:

(1) their overhead costs (including godowns establishment incidental charges, etc.) per unit of production are much less comparatively;

(ii) being situated in the hinterland they save on the cost of transport of raw materials i.e. seeds;

(iii) wages of labour, skilled and unskilled, are also comparatively low;

(iv) they have better contacts with the local producers and consumers

whereas on the side of productive efficiency their expellers are by no means inferior to those installed in Bombay city mills both in respect of daily intake and in the percentage of oil extraction.

13. If, therefore, such a high degree of intensity of competition prevails between different units of large-scale oil production, *a fortiori*, the degree is even much more in the case of their competition with oil ghanis. No doubt, in the Karnatak especially, ghanis which crush kardi or safflower seeds have a slightly lesser problem, as mills do not crush these seeds, yet even this monopoly which ghanis enjoys is to a certain extent qualified by the fact which ghanis enjoy is to a certain extent qualified by the fact that mill-produced groundnut oil is cheaper than ghani kardi oil or ghani sesamum oil. The rural ghani industry like many of our unfortunately annihilated famous cottage industries has a rich heritage of the past. When communications were not developed and interdependence of different village units involved a considerable time with primitive methods of locomotion and when there was not the present facility of transmission of intelligence, village economy was naturally autonomous. In that autonomous economy there was a great corporate consciousness of unity, harmony and feeling of fraternity between different sections. The village had both its agriculture as well as its rudimentary cottage industries and the economic pattern was not lop-sided but balanced. Admittedly, there was then no technological and mechanical advance which is the key-note of mass and large scale production of to-day.

All the same, whatever requirements of the villagers had to be satisfied were satisfied, may be in a lower degree in terms of per captita volume of goods, yet to the entire satisfaction of the consumers at that time by its manifold industry. The oil ghani industry was one of them and it retains that character of a typical cottage industry even to-day. The oilman used to supply settled quantities of oil and oil cake to the villagers and agriculturists and in return he was guaranteed by the village community existence in a reasonable standard of comfort as computed by the standards prevailing at that time. He was never in suspense of unemployment. There was guaranteed off-take of the produce of his industry if not, at what we call now remunerative money prices at least in terms of goods and services in exchange under the barter economy of those days. One of the witnesses narrated to us the pathetic story of the decline of the oil industry of the old days in villages now. In 1908 even costlier oil like sesamum was being sold at 10 to 12 annas per seer. Most of the telis in Satara, Nasik. Pandharpur and East Khandesh districts were landowners also. With the advent of the mills in 1918-1920 things took a worse turn for the teli. The number of ghanis in one part of the East Khandesh district was reduced to 2 or 3 from the earlier figure of 1,500. Persons who were not telis by heredity started joining the business from 1942. During the War ghanis had a short boom period with the higher purchasing power of consumers and with the diminution in the intensity of competition from mills whose energies were engaged in meeting the demands in the theatres of the War. With the cessation of the War the mills again started inundating the market which was temporarily captured by the ghanis and the heydays of the latter were over.

14. We shall now discuss some of the salient factors which have depressed the ghani oil industry. These factors are more or less common to all other cottage industries also :

(1) *Lack of adequate finance and under-capitalisaton* :

We pointed out above that the mofussil mills have a better margin of competitive power as compared to metropolitan oil mills in the city of Bombay. One would have naturally expected that with the location of the ghani oil industry in the very heart of the zones of production, its negligble overhead costs, little costs of transport, lesser wage payment, better opportunities for personal nexus with the growers of oil seeds and the consumers of its products, the balance of advantage in competition should have been heavily over-loaded in its favour and not that of the mill industry, which is situated either in the metropolis or in the mofussil generally in district or taluka head-quarters. This *should* have been the natural and logical course of things, but unfortunately, these natural factors have been neutralised more or less completely by the gravitational pull of high finance which draws with such great suction power all these factors of advantage unto itself. Paradoxically, we find that instead of the villagers selling their produce of oil seeds to their village oilmen they are attracted by the ready finance at even meagre prices which their financiers, the village or the taluka merchants offer them. The merchant in his turn is not interested in conserving the stock for the use of the village oil industry as much as in selling it with his margin to a further chain of adtyas and guaranteed brokers or contractors of the mills in Bombay or the mills at taluka or district headquarters. The ghaniwalla cannot summon sufficient funds to purchase considerable stocks from the growers. We are told that at the most he can afford to buy 10 maunds of seed at a time and that too if he is in fairly affluent circumstances. Even then the seeds he gets are high-priced and the left-over of the produce after the demands of the mills and speculators are met. He has no voice in specifying the limit of tolerable refraction, quality, dirt, etc. In the off-season he has to pay high prices to get the raw materials In many parts the system of production is on piece work basis wherein the consumers bring their little rations of oilseeds for crushing to get oil and oil cake and remunerate the ghaniwalla either in cash or in kind. In Khed taluka of Ratnagiri district the ghaniwalla gets one paylee of paddy for crushing 3 paylees of oil-seeds or three annas per paylee of oil-seeds or sometimes 7 lbs. of oil cake for crushing 3 paylees of sesamum oil. In Mandangad taluka of the same district he gets one rupee for crushing six paylees of seed. A similar system prevails in some parts of the Gujarat district. Even where this system prevails the consumers prefer the mechanically operated rotary ghani as it crushes one maund of seeds at the most in half an hour and charges much less then the Teli; whereas the Teli takes 2 hours to crush one maund of seeds and a part of the cake has to be given by the customer to feed the bullock. It is only in the case of the comparatively more prosperous teli that there is production on a commercial basis i.e. not on a piece work system, but where the teli invests in working capital also e.g. in purchase of seeds and manufactures for sale. One of the effects of his inability to lay by stocks of seeds will be referred to later. With the meagre funds at his disposal he is unable to make good the depreciation of his fixed capital and finds it sometimes difficult to get his ghanis repaired at a cost varying from Rs. 45/- to Rs. 70/- a year. The meagre funds also set a limit to the equipment of his business units. For instance, it is very rarely that one comes across a teli owing a chain of ghanis, say about 10 units, though it is not uncommon to find a chain or battery of rotaries extending upto 7, 8 or even 12 in one mill.

As against this, the competing mills have enormous financial resources which enable them to invest with all meticulous calculation of profitability of business in equipment, technological improvements and also in working capial. The mills are on the look out for the forecast of the yields of crops and book their **orders in advance with their guaranteed brokers** or *mukadams*, who pass them on to the mofussil merchants and who in the ultimate analysis pass them on further to producers. They thus get the contracted quantities of raw materials with deliiveries maturing at different intervals during the course of the year though they need not take cash delivery of stocks for more than one month at a time. Thus, their supply of seeds is more or less guaranteed. The seeds have to be of the quality specified and there is meticulous insistence on the reduction in price if the refraction and quality exceeds or is below the tolerable limit. The field from which they draw their supplies is not limited to the producing areas of this Province only but extends to extra-territorial areas like Hyderabad State, Kathiawar, etc. as they have better access to marketing intelligence with their constant contact with brokers, the Grain Merchants' Association, Chamber of Commerce, etc. They can, therefore, always buy in the cheapest market. We are told that the price of seeds from Hyderabad and Bezwada is 8 annas to Re. 1/- lower per quarter than seeds in this Province even including the cost of insurance, transport, incidental charges, etc. The teli's market, if he is a commercial producer, is restricted to the merchant to whom he is bound in economic bondage by the dead-weight of his personal or ancestral debt. The merchant charges him as high prices as possible for supplying raw material and as we shall see later he buys his oils and oil cake for sale at rates which are cheaper than what he should legitimately get. The oil mills pointed out to us that their supply of stock now-a-days is not so assured as it used to be in the past. They buy for instance through brokers both on cash and future delivery terms. In case the contract is of the latter type, the broker sometimes sells the goods for which he has placed an order with the mofussil or Hyderabad or the Kathiawar State broker himself at a premium in case the prices of oil seeds have gone up before the date of delivery matures. Some mills are, therefore, now insisting that the delivery contract should be discharged by delivery of railway receipts instead of delivery in the godowns of the mills. Secondly, due to transport bottlenecks wagons are sometimes held up and stocks do not come in time. Incidentally the difficulty in securing raw materials coupled with the competition from mills in areas outside Bombay Province such as Mysore, Hyderabad and Madras have been advanced as the major causes for the non-utilisation of full crushing capacity by mills in the Province to-day. For instance, one mill in Bombay which has a crushing capacity of 7,500 tons per year crushed only 1,658 tons last year. All the same, mills have a decided advantage over ghanis in the question of finance and capitalisation.

(2) *Antiquated methods of production.*—Deep conservatism usually governs the methods of production in most cottage industries and the ghani oil industry is not an exception to this rule The Haskell Ghani, for instance, which is claimed by the Government of Bombay to be the best that could be designed so far has not a wide distribution list and we find that so far only 67 such ghanis have been introduced even though the scheme is made sufficiently attractive by the convenience that out of the present cost of Rs. 390/-, which is expected to be reduced shortly, to Rs. 250/-, half is treated as a loan repayable in monthly instalments of Rs. 5/- and the remaining half as a subsidy. We give below a table showing the productive efficiency of different types of country ghanis from which it can be seen that the Haskell Ghani is easily the best and should be adopted as the minimum improvement for the progress of the ghani industry

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Statement showing the comparative results obtained in field tests

ITEMS.	I KULU-GHANI				II HASKELL GHANI			III Haskell Ghani
	Ground-nut	Niger.	Til.	Saf-flower.	Ground-nut.	Niger	Til	Bullock Driven (ground-nut).
1	2	3	4	5	6	7	8	9
(a) Average charge of seeds pressed	16 lbs.	16 lbs.	16 lbs.	16 lbs.	20 lbs.	20 lbs.	20 lbs.	20 lbs.
(b) Average percentage of oil extracted	38.1 p.c.	28 p.c.	41.3 p.c.	—	39.3 p.c.	28 p.c.	42.5 p.c.	39.4 p.c.
(c) Average time per charge.	68 M	68 M	68 M	— M	45 M	45 M	45 M	45 M
(d) No. of charges which could be taken per day	6	6	6	9	8 to 9	10	10	10*
(e) Total seeds which could be crushed	96 lbs.	96 lbs.	96 lbs.	144 lbs.	160-180 lbs.	200 lbs.	200 lbs.	180 lbs.
(f) Weight applied.	224 lbs.	224 lbs.	224 lbs.	—	448 lbs.	448 lbs.	448 lbs.	—
(g) Pull on the bullocks.	50-130 lbs.	50-130 lbs.	50-130 lbs.	— lbs.	50-130 lbs.	50-130 lbs.	50-130 lbs.	— lbs.

of experimental work and appliances on different varieties of ghanis

V		VI			VII				
		WARDHA			STONE-MORTAR				
Haskell Ghani with Superstructure Bullock Driven (groundnut) 10	Haskell Ghani Superstructure Elecricity Driven (groundnut) 11	Groundnut 12	Nigar 13	Til. 14	Groundnut 15	Nigar 16	Til 17	Safflower 18	Remarks 19
20 lbs.	20 lbs.	16 lbs.	—	16 lbs.	20 lbs.	28 lbs.	—	28 lbs.	
40 p.c.	40 p.c.	45 p.c.	—	45 p.c.	37 to 40 p.c.	Less than 28 p.c.	38 p.c.	—	
45 M	30 M	60 M	— M	75-90 M	120 M	120 M	120 M	—	
10*	16	Max.8	Avr.5	5	4	4	4	5	
180 lbs.	320 lbs.	Max. 128 lbs.	Avr. 80 lbs.	80 lbs.	lbs. 80-112	lbs. 80-112	lbs. 80-112	lbs. 140	
— lbs.	— lbs.	— lbs.	— lbs.	— lbs.	—	—	—	—	
—	—	120-190 lbs.	—	120-190 lbs.	—	—	—	—	

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*Recent trials in working conditions indicate that 8 to 9 charges can be taken in the course of 8 hours.

As against this, the average intake per expeller per day is 5 1/2 to 6 1/4 tons and that of a rotary ghani half a ton. Because of the keen competition among themselves the mills strive to reduce their cost of production by introduction of more and more efficient methods of production, rationalisation and business management. They are not conservative in outlook like the ghaniwallas and scrutinise carefully the advances made not only in this country but in other countries of the world in the technique of expeller and rotary oil production and any cost-saving device is unhesitatingly adopted by them. This is a more scientific approach to the question of business efficiency where profit is the elixir of industry and no enterprise is run just fo the fun of it.

(3) *Undependable and weak motive power*—The main driving force for the ghani equipment is the traditional bullock. Not only is it the mortar of the ghani which sets a limit to its daily intake, but what is more important the physical capacity of the bullock is also a regulating factor. The cost of maintenance of a bullock has increased now-a-days being somewhere in the neighbourhood of two to three rupees a day and though the bullock runs the ghani only for 120 days or so he has to be fed all the same for all the 365 days of the year. The average draught bullock which we see now-a-days in the rural areas is hardly the sturdy animal of the old days. He is an emaciated animal with lesser physical endurance and power. Not more than 8 to 10 charges at the most can be done by him in a day. He must have sufficient spells of rest between charges for eating his fodder and for recuperation of strength. Even the proverbial straw sometimes breaks the camel's back. Would not a heavy wooden shaft break the neck of a weary, ill-nourished circumambulating bullock if he is driven to do more than what his physical strength can bear? Bullocks are liable to diseases like rinderpest, foot and mouth disease, etc., which means enforced idleness for the business. Opposed to this, mills work on electricity in Bombay city and on diesel oil or steam engines in districts. The district mills are now-a-days complaining that they too have periods of enforced idleness due to lack of adequate supply of diesel oil for running their engines. Inspite of occasional breakdowns, they are not in a completely helpless position to get their requirements especially with all their business canvassing and persuasive reasoning, etc. It will, therefore, be seen that in motive power also the large scale industry scores over the poor ghani.

(4) *Lack of organised marketing.*—Where the teli produces oil on a commercial basis the outlet for his product is the village or the taluka merchant. The latter exploits him both ways by charging higher prices for seeds and by giving him lower price when he

sells his oil. Whereas the teli cannot grumble about admixture, dirt and other impurities, higher refractive index etc., when he buys his seeds from the merchant, he gets a lower price for his oil from the merchant after deduction for all alleged impurities in his oil like darker colour, free fatty acids, unacceptable refractive index, specific gravity, iodine value, saponification value, etc. The merchant advances the specious plea that after all he has to market the oil to the factories in Bombay manufacturing soap, vegetable ghee, etc., who have set definite minimum and maximum qualifications regarding these factors.

As we shall show in the next chapter there are very few co operative societies of telis for organised purchase of the requirements and organised sale of their products. The number of societies so far organised and registered is 20 covering very few telis and ghanis out of a total of nearly 28,000 families of telis and about 10,000 ghanis in the Province. No doubt the teli does not sell all his oil to the merchant. He sells some of it on the premises and some at the weekly bazars. Where he does this his field does not extend beyond a radius of about 5 miles from the centre of production. As against this, mills have a well-organised system of distribution through agents or their own depots and have no worries regarding the guaranteed off-take of their oil and oil cake If they have an excess of oil and can get better remunerative prices they even export it outside the Province. Their market is, therefore, much wider and more assured than that of the telis.

(5) *No independent price fixation.*—We were told that in many parts of the Province ghani oil is preferred by consumers to mill oil because of its comparatively better durability and flavour. The mill oil produced from expellers and rotaries is normally on a double mechanical pressure system where the first part of the process is a cold process and the second a hot process. It is said that the latter process gives to the oil a peculiar flavour which is not so good as that of ghani oil Secondly, it is liable to quicker deterioration with the presence of free fatty acids, etc. that consumers now-a-days are more attracted by the price rather than the quality of the oil itself and they, therefore, prefer mill oil. It is very rarely that like the miller the ghaniwalla calculates the price of his oil independently taking into account his own cost of production, elasticity of demand from consumers, etc. Though where there is decidedly a clear indication of consumers' preference for ghani oil that oil sells at a premium over the corresponding mill oil from the same category of oil seeds, it is generally the case that the price at which the ghaniwalla sells his oil is the price at which the mill oil is sold in the market. In the matter of pricing the ghani is normally a marginal firm. If by coincidence due to fortui-

tous economic factors, speculation and shortage of supply of oil seeds, the prices shoot up, the ghaniwalla gets the corresponding increase in prices as do the mills also; but, more so the mills. Because the stocks held by an average teli do not exceed 10 to 15 maunds at a time whereas the stocks with mills are considerably larger. Therefore, it might happen that having no seeds with him which were purchased at the previously low prices he cannot take the full advantage of the speculative increase in prices of oil. To do this he has to buy fresh stocks at high prices which is not worthwhile.

Coming to the question of speculation we might as well mention here what we were told by responsible representatives of the mill industry in the Province. The volume of speculative trading in oil seeds is computed to be roughly 8 to 10 times that of genuine trading for industrial requirements. Supposing a mill has placed an order with a broker for X tons of oil seeds, the latter places an order with the mofussil supplier for double or treble that quantity simply to shoot up the prices at a later stage with increased demand and to reap an unearned harvest of speculative trading. There is a normal seasonal fluctuation in prices of oil seeds. At harvest time there is a dip in prices with considerable stocks forthcoming relatively to the demand with the lower level of holding power of producers who are in a hurry to dump the markets with their goods and to get liquid funds quickly instead of conserving the stocks for better equilibrium prices later on. In the off-season there is a rise in prices with acute shortage of supply.

We are told that both mills and ghanis resort to malpractices now-a-days like adulterating not only oils of higher quality with those of lower quality, for instance til oil or kardi oil with groundnut oil, which is the cheapest of all oils, but also admixing with oils unedible mineral oils like white oil or spindle oil. We are told that white oil is very cheap and costs Rs. 1-8-0 per gallon or Rs. 4-8-0 per quarter. Its real use is as a lubricating oil for machines and tools, but it is freely used in hair oils and also as a cost reducing agent in edible oils. One person told us that the admixture may be somewhere about 12 1/2 per cent. of the total quantity of the oil supplied whereas another who was more sceptical and more frank told us that it may be even to the extent of 21 per cent. The wholesale merchant who buys from the mills in barrels thinks that the mills could not have resorted to this malpractice whereas mills have already whittled down the oil by 7 per cent. at the time of delivery. So the wholesale merchant adds 7 per cent. more thinking that there is no harm in his doing so. The retailer, who in his turn, credits the wholesaler with high moral integrity thinks that there is no admixture and that he is the first shrewd man to dupe the consumers, So he adds about 7 per cent. more with the result that in the ultimate analysis the unwary consumer gets a noxious dose of 21 per cent. oil which instead of lubricating the guts of machinery causes all kinds of intestinal troubles in his own guts. This malpractice which has been solely based on motives of profiteering must be sternly put down, by the State with deterrent and punitive action. We regret to say that even the ghaniwalla, whose cause we are supposed to champion, has soiled his hands in this game. We are told that in some cases ghaniwallas play another game which is compared to this slightly innocent. They pass off to consumers especially where their preference for ghani oil is marked cheaper mill oil with some ghani flavour passed through the mortar. This is reprehensible and if the ghaniwalla has to retain his prestige and his claims are to be irreproachable he must maintain a high degree of business morality, otherwise we would be ashamed of having championed the cause of a person who is as unscrupulous as other black sheep in such immoral activities. Those persons who practice this fraud on society deserve to stay in the jail and not at large.

The oil seeds crushing process yields twin products: oil and oil cake. Here again there is a slight preference for the ghani oil cake for purposes of cattle feed because the cake contains 13 to 14 per cent. of oil whereas the mill cake contains 8 to 9 per cent. of oil and it is said that the higher the oil content the more palatable and nutritious is the cake for cattle. Conversely, the mill oil cake scores over the ghani oil cake as fertiliser. The higher the oil content of the cake the lesser its utility as a manure for soil. Therefore, the mills have captured a greater market of supply of fertiliser oil cake to producers growing crops under irrigation. Incidentally it may be noted that oil cake manure is not suitable for dry crops. The greater the percentage of albuminoids and the lesser the precentage of sand the cake fetches higher prices and *vice versa*. In 1943 Government issued an order freezing the stocks of oil cake with mills and fixed a flat purchase price of Rs. 130/- per ton for the cake. The object behind this was to make sufficient oil cake available to producers at reasonably cheap prices for manure. While the control and the freezing of stocks lasted, the teli got a windfall premium on the sale of his oil cake. We are told that the prices of the ghani oil cake went up to Rs. 240/- per ton. But this temporary advantage which the ghani accidentally got no longer exists because in February 1949 the control on the price of mill oil cake was lifted and there was no ban on its free mobility with the result that now we understand the price of mill oil cake has risen to Rs. 180/- per ton; whereas the price of the ghani oil cake is slowly coming down. Apparently, the normal margin between the mill and the ghani oil cake is about Rs. 5/- to Rs. 10/- a ton.

So it is not unlikely that the mill oil cake prices might go still a bit beyond Rs. 180/- a ton and the ghani oil cake prices might drop further, so that an equilibrium might be reached at a level where the difference between the two prices would be about Rs. 5/- to Rs. 10/- a ton. In any case, the welcome windfall which the ghanis enjoyed, during the period of control of mill oil cake no longer exists. The fixation of prices of oils by mills is not only governed by speculative activity, equilibrium between demand and supply, international prices, free or restricted mobility, but also by the price which their oil cake can fetch in the market. If the oil cake can produce higher prices and widen the margin of profit, the mills would not hesitate, if need be, to reduce the oil price.

(6) *Relatively higher cost of production.*—We have worked out the crushing or operating costs for the production of one pound of oil in respect of a ghani and a mill employing expellers and a mill employing rotaries which are given in Appendix 'B'. It shows that including the question of the price of and the proceeds from the sale of oil cake, the margin between the crushing cost in respect of a ghani and a mill using expellers and rotaries is roughly about 12 pies per pound of oil. The lowest crushing cost in respect of a mill is 4.1 pies and the highest 8.5 pies per pound of oil. Similarly, for a ghani the lowest cost for crushing is 15 pies and the highest is 22 pies per pound of oil.

(7) *Absence of subsidiary industries.*—There are only two products which fetch income to the teli from his business, *viz.,* oil and oil cake. This limitation of avenues of income does not fetter mills. For instance, recently many oil mills have taken up many other side lines like hydrogenation of oil, manufacture of vegetable ghee, vegetable tallow, candles, soap, lubricants, hair oils, glycerine, paints and varnishes, etc. They are not solely dependent therefore on the sale of oil or oil cake. Some mills have even taken up the business of merchants. They undertake export and import of seeds on commission basis. They also stock seeds not only for the purpose of industrial production but also for re-sale waiting for the speculative rise in the prices and we are told that in one case speculative trading gave enormous profits which were even more than those obtained from the elaborate process of production of oil and oil cake and of the attendant worries that it entails. There are some telis who have agricultural land. They get about Rs. 500/- to Rs. 1,000/- annually from this source and from other sources like kirana and grocery business, plying carts for hire, etc. But the average indigent teli has no other source of income.

Whereas the percentage of oil produced from crushing of oil seeds is 40 per cent. of the weight of the oil seeds in the case of a Haskell ghani with superstructure, it is 42 to 43 per cent. in the case of an expeller and 38 to 40 per cent. in the case of a rotary ghani. The mill-owners take particular care to keep records of extraction to see that the percentage does not diminish and that if possible it increases. This careful watching of increased efficiency of production is conspicuously absent in the case of ghanis.

15. The sum-total of this analysis is that production in oil mills is more businesslike. It is watched with lynx-eyed vigilance. With all effort to reduce the unit cost of production and to maintain or increase, if possible, the profit margin, wider spreading of enterpreneurial risks by multiplying side lines, elasticity of business manoeuvres, intelligent sifting of marketing and commercial news, wider network of business organisation and contacts, the resultant is huge profits and dividends. Though taxation local, municipal and central takes a big slice of the gross income of business, it still leaves quite a tidy residue in view of the fact that the percentage of its incidence falls on a larger absolute or principal. Compared to the millowner the unorganised ghaniwalla is a play-thing of fortuitous circumstances, moved hither and thither, mated and slayed on the chequer board of unequal competition, with no holding power, drifting more or less like flotsam and jetsam in market conditions which are regulated less by his contribution to the production and more by that of his rivals, exploited by the merchant and in turn now degenerating into exploitation of his poor consumers. Does he deserve our sympathy or should a *laissez faire* economy leave him to his fate flying the banner of the Darwinian 'survival of the fittest' in an economic aggression of high finance against penury?

CHAPTER III.

ASSISTANCE SO FAR GIVEN BY GOVERNMENT.

16. Opinion in the Province is divided on the issue whether the equipment and methods of production employed by cottage industrie sshould be retained or whether they should be discarded and replaced by mass production and large-scale enterprise employing modern mechanized equipment and devices like electrical motive power or power from diesel oil and steam engine. Some consider that ghanis should be replaced by expellers and rotaries whereas some maintain that in rural areas at least ghanis should continue to form the basis of oil production, as they involve lesser cost and give employment to villagers who have taken up oil

production as their daily profession or who take it up during the doldrums of agriculture as a side-line for supplementing their income from agriculture. The latter maintain that (1) by retaining oil ghanis the telis will be able to continue their business near their places of habitation which will have physical, moral, material and other benefits, (2) replacement of ghanis by machinery will mean a loss of the material equipment and inherited skill, which has already been sunk in the business. The Administrator, Danta, says, "If India wants to enter international competition let it rush towards more and more rationalisation; if it wants the old golden days without bothering about international trade as in the past let it develop cottage industry and be self-supporting. Then every man will be employed in doing something substantial and will be self-supporting. Let everybody be a labourer in some form or another. I am reminded of Goldsmith's prophetic lines:

> "Ill fares the land
> To hastening ills a prey,
> Where wealth accumulates
> And men decay."

The poet has very briefly prognosticated the whole impending future and we are realizing the truth in this statement. The sooner we try to mend matters the better for as all, the more we mince matters the worst for us all. No philanthropist can do this for there is no philanthropist with more resources than national Government keen to ameliorate the present condition of chaos and confusion.

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The ghani will never be able to compete with the oil mill in spite of all developments and facilities extended to it unless the people become ghani minded, unless the people are awakened through educational medium that all hand-work is more noble, more elevating and more pious, unless they are awakened to the fact that all mechanical processes destroy much of vitaminal nutrition vaules of all foodstuffs. So it is futile to think of margin, etc. in respect of ghani oil. In these hard days when there is one to earn and many to eat a man hardly sits to think whetcher ghani oil or mill oil, khaddar or mill cloth, ghee or vegetable oil is better; for he is constrained to cut the coat according to the cloth. He looks to the money in his purse and buys things and somtimes even goes without necessities while the speculator and gambler is rolling in fabulous riches and does not know even how much he has got".

17. Many Commissions and Committees have recommended the rehabilitation of cottage industries, for instance, the Indus-

trial Commission, the Royal Commission on Agriculture, the Bombay Industrial Enquiry Committee, the Central Banking Enquiry Committee for the Revival and Promotion of cottage industries, the Cottage and Small scale Industries Sub-Committee of the Provincial Industries Committee, etc. The National Planning Committee has also resolved that "while all possible measures should be taken to strengthen the economic basis of cottage and rural industries by arranging for the requisite finance, providing facilities for securing and storing raw materials, re-adjusting freights, improving marketing, etc. such other protection should be given as the Planning Authority may consider necessary and desirable to neutralise such disadvantages as may remain". The Government of India has also expressed its solicitude in the welfare of cottage industries. The following is the relevant text of Government Resolution 1 (3)/44(13/48) of the Ministry of Industry and Supply, dated April 6, 1948. "Cottage and small scale industries have a very important role in the national economy offering as they do scope for individual village or co-operative enterprise and means for rehabilitation of displaced persons. These industries are particularly suited for the better utilisation of local resources and for the adjustment of local self-sufficiency in respect of certain types of essential consummer goods like food, cloth and agricultural implements. The healthy expansion of cottage and small scale industries depends upon a number of factors like the provision of raw materials, cheap power, technical advice, organised marketing of their produce and where necessary, safegards against intensive competition by large scale manufacture as well as on the education of the worker in the use of the best available technique. Most of these fall in the Provincial sphere and are receiving the attention of the Governments of the Provinces and the States. The Resolution of the Industries Conference has requested the Central Government to investigate how far and in what manner those industries can be coordinated and integrated with large scale industries. The Government of India accept this recommendation. It will also be investigated how far industries at present highly centralised could be decentralised with advantage. The Resolution of the Industries Conference has recommended that Government should establish a cottage industries board for the fostering of small scale industries. The Government of India accept this recommendation and propose to create suitable machinery to implement it. A Cottage and Small Industries Directorate will also be set up within the Directorate General of Industries and Supplies. One of the main objects will be to give a distinctly co-operative bias to this field of Industry". Government of Bombay has also passed a resolution (Resolution

No. 8001, Education and Industries Department, dated June 29, 1948) in which it has affirmed its desire to promote rural cottage and small scale industries.

"The lesson of western industrialisation is clear that there is tremendous human suffering on account of the sudden disappearance of familiar domestic industries and subsidiary occupations."

Anxious as Government is to avert this calamity and desirous as it is, besides, avoiding an excessive concentration of economic power in the hands of a few, it appreciates the need for positive State action to enable cottage and small scale industries to secure the prominent place to which they are entitled in the industrial structure of the Province. Government proposes to rely chiefly on the following measures of assistance to cottage industries:

(1) in areas where village centres are not established, in the first instance, Government will intensify the activities of demonstration parties to teach certain useful crafts to the rural population;

(2) to indicate its preference for the products of cottage industries, Government will liberalise its present terms of concessions in the matter of stores purchase;

(3) the Government will extend its programme of electrification to rural areas and subsidize where necessary purchase of suitable equipment required for the introduction of mechanization;

(4) for the economic organisation of workers in cottage industries Government will promote formation of industrial co-operatives and for this purpose provide grants for specific periods;

(5) through the Provincial and Industrial Co-operative Associations principally Government will provide for primary co-operative societies to make suitable arrangements for marketing and finance and for the improvement of tools and processes;

(6) as a part of this programme Government will investigate how far industries at present highly centralised can, with advantage, work on a decentralised basis. The object of the various measures designed to assist cottage industries will be mainly *to enable those engaged in them to organise themselves so as to face the competition of factory products with only such State assistance as may be regarded a reasonable price for the attainment of the social objective associated with cottage industries."*

18. In this context let us now assess the extent of the assistance given so far by our Government to the ghani oil industry in this Province.

19. The Haskell Ghani was invented in 1940 and provision for a super-structure and arrangements to enable it to be driven by electricity were made in 1946. The two-inch diameter ball bearings were replaced by one-inch diameter double row ball bearings with a novel method of suspension of the weight-beam. The cost of a Haskell ghani is Rs. 390. Actually this does not include the mortar, but only the pestle and other improved devices. These improvements are made available to hereditary telis and the Haskell ghani apparatus is installed in the mortars by the Department of Cottage and Small Scale Industries. Half of this cost viz. Rs. 195 is given as a subsidy to the teli who uses it and half viz., the remaining Rs. 195/- is treated as a loan free of interest to be repaid by the teli in monthly instalments of Rs. 5/- each. The Government maistry gives the teli necessary assistance in the preliminary installation of the Haskell ghani and helps him later on with technical assistance if repairs become necessary. So far only 67 Haskell ghanis have been installed. Training classes of a duration of one month are being conducted at the Village Industries Experimental Workshop in Poona to train hereditary telis in scientific extraction of oil in Haskell ghanis. They are given stipends at the rate of Rs. 25/- per month and travelling allowance from their place of residence to the work-shop and return to their residence not exceeding Rs. 10/- is also being given to them. Lodging arrangements for the telis have been made in the dormitory of the workshop. The staff consists of one Assistant Engineer, three ghani mechanics, one oilman and one attendant for bullocks. 125 telis have been trained so far at the workshop. There is also a scheme for the manufacture of 1,000 more Haskell ghanis. We are told that the posssible rate of production at the experimental workshop is in the enighbourhood of 100 ghanis per month but this rate has not materialised so far. Individual telis are given loans for working capital to the extent of Rs. 500/-. In Government Resolution, Revenue Department, No. 4531/39 of July 25 1947, Government authorised the Joint Registrar of Industrial Co-operatives and Village Industries to sanction loans upto Rs. 5,000/- for working capital and loans upto Rs. 5,000/- for tools and equipment to each Co-operative Society of telis. Of the latter, 50% is to be given to the Society as a subsidy and the remaining portion is to be treated as a loan carrying interest at 4% per annum repayable during a period not exceeding 5 years in equal six monthly instalments. A co-operative society of telis is also

eligible to a subsidy of Rs. 600/- to meet its management expenses. In the case of the individual teli the repayment of loans is spread over a period not exceeding 5 years and the payment of the first equated monthly instalment commences after one year from the date of the disbursement of the loan.

20. As considerable difficulties were experienced by telis in securing suitable wooden logs for the preparation of mortars, Government has asked the Forest Department to lay down a condition while auctioning the coupes that logs suitable for mortars should be preserved by the conractors. To obviate difficulties in securing wooden logs for mortars, a suitable reinforced concrete mortar has been designed at the experimental workshop and is under trial. It is also expected to reduce the cost of the Haskell ghani for Rs. 390/- to Rs. 250/-.

21. So far 20 societies of oilmen have been registered. As an experimental measure, Government has sanctioned special concessions to four such societies in Government Resolution, Revenue Department, No. 1474/39 of March 12, 1948.

Item 1	Pandharpur 2	Khed 3	Charegaon. 4	Chandwad 5	Condition. 6
1. Government guarantee to Central Financing Agency	96,000	61,920	32,400	15,180	Government guarantee to Central Financial Agency at 25% of the goods pledged or hypothecated (on the basis of requirements of the oil seeds for three months) on the condition that the Government guarantee would operate after the guarantee in the form of the share capital and the reserve fund is exhausted.
2. Loan for purchase of ghanis and other tools and equpments	2,100	2,725	2,100	2,850	Ghanis should be supplied on loan - cum - subsidy basis and amounts for other tools and equipments in accordance with rules in Government Resolution, Revenue Department, No. 4531/39, dated 25th July 1947.

1	2	3	4	5	6
3. (i) Loan at 4% for purchase of an oil engine and a decorticator, repayable with interest	—	7,900	—	—	The loans should be repaid in five equated annual instalments. The articles should be mortgaged to Government. The first instalment shall commence after one year from the date of paymet of the loan.
(ii) Loan at 4% purchase of a motor truck, repayable with interest	—	—	10,000		
4. Subsidy for rent of godown at the the rate of 1/3 rent of the godown subject to the maximum of Rs. 300/- per year.	300	300	300	300	The total amount should not exceed Rs. 1,200/-.
5. Cost of appointment of Sub-auditor in the grade of Rs. 75—5/2—90 as Manager of the Khed, Charegaon and Chandwad societies and a senior sub-auditor in the grade of Rs. 95—5—130 in the case of Pandharpur society for one year in the first instance or alternatively cost of employment of the employees of the Bombay Provincial Co-operative Bank to work as managers of Charegaon and Chandwad Societies at a cost not exceeding Rs. 1,500 per year.					

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22. Government has also approved the schemes submitted by the Village Industries Committee for starting an oil centre in Dharwar district and a grant-in-aid of Rs. 2,600/- has been sanctioned to the Committee to run the centre. It has also approved a scheme for starting 10 co-operative societies in the West Khandesh district for the development of the village oil industry on a self-sufficient basis by introducing 10 Haskell ghanis. In the course of time Government expects to introduce 100 Haskell ghanis in that district. We understand that the Village Industries Committee has sent a five-year plan to Government, which contemplates organisation of 500 centres during a period of five years, each centre having two ghanis and payment of a subsidy for purchasing tools and equipment.

23. This is the positive aspect of the assistance given by Government so far. In addition, as a negative measure Government has decided not to encourage new oil mills and to refuse any facility by way of land, import of machinery, issue of capial, etc. required by them. We understand that Government is also considering a system of licensing of oil mills employing rotaries and expellers.

24. This is the sum-total of the assistance given by Government so far to the village oil industry. Let us examine whether this assistance is adequate and whether it will rehabilitate the teli whose difficulties we have examined at length in Chapter II. We have seen in para. 14 in Chapter II that the daily intake of seeds and productive capacity of oil in a Haskell ghani are higher than that of the traditional stone mortar ghani, the kulu ghani and the Wardha or Manganwadi ghani. There is no immediate prospect, however, of driving the Haskell ghani with electricity. The Electric Grid Scheme is still in the process of gestation and the utilisation of electrical power from Jog and the Kalinadi is still to be undertaken. It will be years before electricity infiltrates into remote villages apart from taluka head-quarters. It might perhaps be possible to drive the Haskell ghani by diesel oil and by steam. Experiments in this direction would, therefore, be more useful than merely banking on the use of electricity. It is certainly desirable to organise individual telis into co-operative societies. In fact, we have already mentioned this. Such an organisation will give them better bargaining power in securing raw materials, better financial stability with pooling of individual resources, better bargaining power in the sale of their produce and better opportunity of getting market intelligence if they are affiliated to Sale and Purchase Unions and to the Provincial Co-operative Marketing Society. But the mere formation of co-operative societies of telis only is not enough nor will it meet all their essential difficulties, which we

have mentioned in Chapter II. For instance the main difficulty of securing raw materials will still persist unless producers of oil seeds are also included in the societies. In our opinion the active association of agricultural and rural industrial producers is the key-note of all schemes for both the rehabilitation of persons engaged in rural and cottage industries and also the producers of the raw material of those industries. From the side of consumers also it will prevent adulteration of oil. When consumers of oil are associated with telis they will vigilantly watch the proper, hygienical and economical manufacture of the commodity which in the end they themselves have to consume. We have worked out this aspect at greater length in Chapter IV and, therefore, shall not dilate on this matter here except merely stating the principle.

25. Though the organisation of telis' societies is only a slight improvement on the present position, it does not reduce *ipso facto* the cost of production. On the contrary, whereas an individual teli saves on establishment and overhead costs, even a small co-operative society has to provide for these institutional costs. Agricultural producers who are not members of such a society will not have much interest in supplying raw materials to teli co-operative societies so long as their nexus with the village merchant through whom their produce finally reaches the mills is not broken.

26. We now come to the question of loans for fixed and working capital promised by Government to each society. The equipment consists of a ghani, a bullock, some filter pans, building for storage of raw materials and finished products. This would involve the following cost at the present day prices:

Ghani	... Rs. 300/- to Rs. 400/-
One bullock	... Rs. 300/- to Rs. 400/-
Godown for storage for one ghani	... Rs. 1,000/-
Weights, measures, scales, etc.	... Rs. 150/-
Filter pans	... Rs. 200/-
Total	... Rs. 1,950

For two ghanis the cost will be Rs. 3,900/-.

27. Assuming that a society covers only two ghanis the loan of Rs. 5,000/- for fixed capital will be adequate. But this figure of two ghanis needs to be mentioned specifically in the Resolution. The society at Pandharpur covers 105 ghanis. It might be said

that before these telis were incorporated in the society they must have had some capital. Yet all of these are not Haskell ghanis nor are all the bullocks efficient. Though for the Pandharpur Society and three other societies, special assistance has been given, other 16 societies are not covered by the Resolution giving extra aid.

28. According to our computation there are about 10,000 ghanis in this Province, out of which only 67 are Haskell ghanis. Undoubtedly, the introduction of the Haskell ghani is eminently desirable and it is necessary to convert the remaining 9,933 ghanis into the Haskell pattern as early as possible. Assuming a five year programme, 1,987 ghanis need to be introduced annually. The present pace is not encouraging and needs immediate acceleration. Co-operative Societies will naturally have to convert all their present ghanis into the Haskell pattern as early as possible. In view of the fact that even in a Haskell ghani the daily output of oil does not exceed 36 seers and of oil cake 54 seers, which is hardly very remunerative, it is necessary that co-operative societies must work the ghanis for at least 300 days in a year on the same scale as mills. This will require, therefore, 675 maunds of seeds per year. At the average rate of Rs. 25/- per maund of groundnut seeds, which are the cheapest of all edible oil seeds, this would mean an outlay of Rs. 16,875/- per ghani or Rs. 32,750/- for two ghanis. Rs. 5,000/- for working capital will be sufficient only if a society had 2 ghanis. It is necessary again, as in the case of fixed capital, to specify the assistance by the number of ghanis rather than by the number of societies. Different societies may consist of widely divergent units of ghanis.

29. The system of guaranteeing 25% to central financing agencies against possible losses for advance of loans to co-operative societies for purchase of oil seeds is, in our opinion, not desirable. In actual practice, from the report of the Pandharpur Co-operative Society, we find that inspite of this guarantee there has been no appreciable assistance in getting the requisite cash credit from the Sholapur District Central Co-operative Bank. This again reinforces our observation above that the mere formation of co-operative societies is not the solution of the difficulties of telis in securing raw materials. We do not recommend that Government should continue the hazardous and practically infructuous system of guaranteeing the Central Financing Agencies against losses to such a large extent as 25% of the amount of the cash credits. This will run into crores if the system is to be logically and fairly extended to all such co-operative societies of which there will be quite a large number in course of time.

30. We offer no comments on the other schemes to which we have referred above viz. those of the Village Indsstries Committee. They only touch a fringe of the problem, an idea of whose magnitude we have given already, without offering a radical solution. Instead of having fragmentary schemes of different kinds, it is better to go to the very root of the problem and eradicate all the handicaps.

31. The question whether new oil mills should be banned is, to some extent, problematic and will need careful study of various facts and figures. According to the Report of the Panel on Oils and Soaps appointed by the Government of India in 1946 the production of oil in India including the Bombay Province is not adequate. The Food and Forest Industries Sub-Committee of the Provincial Industries Committee, Bombay, also agreed with this. The Panel and this Committee suggested that the acreage and production of oil seeds and the number of expellers for their crushing need to be increased so as to step up the production of oils and fats to bring it to the desirable level of 2 ozs. per capita per diem, as recommended by the Nutrition Advisory Committee of the Indian Research Food Association and the Famine Enquiry Committee. We do not wish to delve deep into this problem. Increased production of oil seeds has also been advocated by some for purposes of export to foreign countries to secure increased requisite hard currency exchange and favourable balance of trade. We are faced to-day with a considerable deficit in our food supplies and we have to look to foreign countries for food to the value of 130 crores of rupees to compensate it. While a greater production of oil seeds may perhaps be necessary for our earnings of foreign exchange, to provide for a favourable balance of trade and to increase the per capita consumption of oils and fats in the country, we also need the maximum use of every inch of cultivable land to increase our edible foodgrains i.e. cereals and millets. In the Bombay Growth of Food Crops Act oil seeds have neither been included in the Schedule of foodcrops nor of non food-crops. Unlike cotton and tobacco which are scheduled non-food crops no maximum has been stipulated in respect of their proportion to the total cultivable acreage of a cultivator's holding. The minimum proportion of acreage under foodcrops is 2/3rds of a cultivator's holding. In Appendix 'D' we have given figures of the acreage and production of oil seeds in recent years. It appears therefrom that the acreage and production of oil seeds has not shown any diminution. On the contrary, there is some increase in both the acreage and production of some oil seeds, for instance, groundnut and sesamum. It is doubtful to us whether with a mere increase in the marketable quantities of edible oils in this Province, there will be an automatic increase in the per capita

consumption. First of all there is the factor of what ration the population in rural areas has been used to in the past. We understand that the consumption of oils and fats is much greater in urban areas than in the rural areas. Secondly, even assuming that there is more oil in the market, it is doubtful whether there will be sufficient purchasing power in villages to buy all that is offered unless, of course, it is contemplated that this increased production of oil should be not so much for local sales in the Province as for export to foreign countries to earn foreign exchange. If the latter, then the argument that by increase in production we increase the per capita consumption to the level mentioned by the Nutrition Advisory Committee will not be tenable. The scheme which we are going to propose in Chapter IV does not envisage elimination of mills from the oil market. What we have in mind is the production of oil locally in rural areas by processing the raw material readily avilable in the neighbourhood either through oil ghanis or through expellers owned by entire village communities of a zone rather than the transport of raw materials all the way for hundreds of miles to mills in urban centres and their re-transport back in the form of oil and oil cake to rural areas, which are the main consuming centres. There will still be scope for oil mills for supplying the needs of the residents of urban areas and for supplementing the deficit if the rural production in the centres we are contemplating falls short of the demand. Moreover, it is still possible for mills to produce oil for industrial purposes which is used in the manufacture of soap, vegetable ghee, candles, glycerine, paints, varnishes, hair oils and other consumer goods apart from edible oils and oil cake. Instead of completely banning new oil mills we would have suggested to Government that they should be encouraged only on a strict condition in their licence to the effect that in view of the under-utilisation of the full productive capacity by existing mills, they will not manufacture edible oil and oil cake, but only the commercial non-edible commodities we have mentioned in the foregoing sentence.

32. We strongly recommend that all existing mills as well as new ventures should be compulsorily registered and should be licensed. We explain the licensing system in detail later on in Capter IV.

33. Under the Indian Oil Seeds Committee Act, 1946, the Government of India constituted the Indian Oil-seeds Committee. Some of the relevant duties of this Committee are:

(i) to promote the improvement of marketing of oil seeds and their products including the setting up and adoption of a graded standard for oil seeds and their products, and

(ii) to promote integrated co-operative movement in the oil seeds industry.

The income of the Committee consists of an excise duty of one anna per maund on oil extracted by mills and an export (customs) duty of two annas per maund on seeds exported out of India.

Of these, the latter source of income will not now be open to the Committee, as the export duty on oil and oil seeds has been removed recently. Let us see how much of the fund has been utilised by the Committee for the improvement of the oil ghani industry in this Province so far. From its report ending March 31, 1948 it is seen (i) that it has decided to award a prize of Rs. 2,000/- to any person or body who or which designs the best model of hand decorticator for groundnuts, (ii) that it has decided to start at Nagpur a Central Institute called the Village Oil Industries Training Institute for training telis free of charge, (iii) that it has decided to bear 50% of the cost in connection with the appointment of officers by the Provincial Government for forming co-operative organisations of telis and growers of oil seeds, (iv) that it has decided to take steps to improve the quality of expellers manufactured in India; (v) that it has resolved to move the Government to take steps to compulsorily agmark all oils to prevent adulteration of edible oils, (vi) that it has applied its mind to the improvement of the facilities for storage tanks at Railway station yards and adequate transport facilities and priority for transporting empty containers from milling centres to centres of production, (vii) that it has also recommended to Government fixation of minimum price levels of oil seeds and to increase the production of oil seeds in India without affecting the area under food-crops, (viii) that it has advised Provincial Governments to prepare schemes for seed multiplication and development of the staple crops; (ix) that in its opinion the Village Oil Crushing Industry which existed before the mills were established should not be allowed to perish, as besides providing occupation for telis for the whole year, this industry also ensures part-time remunerative occupation for the cultivators and their cattle; (x) that it has decided to award a prize of Rs. 5,000/- to any person or body who or which designs the best model of a village ghani satisfying the following conditions :

(1) the capacity per charge should be over 10 seers,

(2) the time taken to crush one charge should be not more than one hour in the case of til seeds,

(3) the ghani must be run by a single bullock,

(4) the price should not exceed Rs. 200/-,

(5) the cake should not contain more than 10% of oil,

(xi) that it has also recommended to the Government of India regulation of future trading in groundnuts.

34. We referred to the evils of speculative trading in oil-seeds in Capter II, which is as much as 8 to 10 times the volume of genuine trading. As we have shown, speculative higher prices of oils hardly afford any windfall to the teli, as he does not stock oil in large quantities nor does he buy seeds in sufficient bulk for storage whereas the speculative high prices of oil-seeds do hit him adversely. Though the long-term effect of speculation is to minimise the margin between highest and lowest prices of commodities, its short-term effect is always harmful and it is the short term effect that hampers small producers like telis.

35. The survey of the assistance given by Government so far shows that it is infructuous. It is not commensurate with what would legitimately have been expected on the basis of the difficulties of telis recounted in Chapter II. The key-note of the assistance given should be that it should be pitched at that level at which it becomes effective. No doubt, preliminary scrutiny is necessary to see whether an industry does deserve help in the national interest not only in the interest of the owners of that industry be they villagers or residents of urban areas, but also of the consumers who guarantee the off-take of their produce. Having decided that a particular industrial unit satisfies these canons and deserves help, Government should then go the whole hog and make good the deficit which retards remunerative enterprise in that industrial unit, which has been chosen as the subject of assistance. Fragmentary assistance only means waste of funds. It is not enough to give merely subsidies at a hypothetical figure. The exact amount of the loans has also to be calculated. Of course, for both these purposes the extent of help coming from other sources apart from Government such as co-operative Central Financing Agencies or other banking institutions should also be taken into account to decide what is the minimum for which the industry has to look to Government. The technical improvement in equipment,, etc. through measures taken by the Provincial Government and the Indian Oil-seeds Committee does not solve the fiscal issue. If the outlay which the State has to incur is considered too great to meet the requirements of all the 10,000 ghani units, it would be better to give adequate assistance on a larger scale to smaller number of

units and help them fully, so that they will be profitable concerns rather than disperse the same amount over a wider range of units, the result of which in the end is that none of the units so helped gets adequate assistance and none of them becomes a profitable concern. In this way the amount given as subsidies becomes a sheer waste of public funds. Loans to industry must be of a self-liquidating character, that is to say, they must put the industry which they are designed to help on a sound, stable and profitable basis, so that out of the productive use of the loans sufficient repaying capacity is generated and both the industry to which the loans are given profits and the State also has no difficulty in recovering the amount with ease instead of resorting to coercive processes like foreclosure of mortgages, sales by distraint, forfeiture, etc.

CHAPTER IV.

EFFECTIVE SOLUTION OF THE PROBLEM

36. We shall now proceed to examine what assistance should be given by Government for the promotion of the ghani industry bearing in mind all the difficulties which handicap it at present.

37. One suggestion which has been made to us is that the problem of supply of raw material would be solved if Government purchases during the harvest season oil-seeds yielding edible oil, groundnuts, sesamum, khorasani, niger, safflower, etc. and makes them available at cost price to the telis bearing the cost of transport, overhead costs, etc. itself and giving this amount indirectly to the telis as a subsidy. According to the suggestion, Government will buy oil-seeds not only in the producing areas of this Province, but also from other areas like Hyderabad, Kathiawar, Bezwada, etc. at the cheapest available rate and the suggestion expresses the hope that, in view of Government's vast organisation, it should be possible for it to get wider market intelligence to do this. We are not in favour of acceptance of this suggestion. We have recommended in the previous Chapter that the distribution of Haskell ghanis should be accelerated so as to cover the entire Province in a minimum period of 5 years. The quantity of oil-seeds crushed per day in a Haskell ghani is approximately 180 lbs. or 2 1/4 maunds. For a period of 300 working days in a year—the present figure of 120 to 240 with an average of 180 days is, in our opinion, uneconomical—the quantities of oil-seeds required would be 675 maunds. At the rate of Rs. 25/- per maund for groundnuts, which is generally the cheapest of oil-seeds, this would come to Rs. 16,875/-. If this is multiplied by 10,000 ghanis, the outlay would be Rs. 16,87,50,000/-. This means nearly an outlay of more than one-third of the total

Provincial revenues and would involve huge borrowing of funds from the market for Government loans. No doubt, it might be said that this will help to neutralise inflation and to mop up surplus purchasing power, but it is very doubtful whether a vast sum of this magnitude will be forthcoming from liquid investible funds in this Province at the normal rate of interest of 3% per annum. Apart from this, it will also mean considerable arrangements for storage, transport, safe preservation, insurance, establishment cost of godown-keepers, account keepers, etc. Even if these charges are computed at the minimum of 10% of the outlay, the figure would work out to a huge amount of Rs. 1,68,75,000/-. If, therefore, Government were not to charge these costs incidental to the purchase and sale of oil seeds of these vast quantities, it would mean an astronomical subsidy which eventually throws a very heavy burden on the tax-payer. Government has had already sufficient difficulties in building or securing godowns for storing food-grains and taking precautionary steps to prevent their deterioration and it seems to us quite unnecessary to saddle it with the further care of the preservation of such huge quantities of oil-seeds with incidental possbilities of loss and destruction by rodents, insects, and other agents, etc.

38. It was suggested to us that Government should stop the export of seeds from the Province and also ban inter-village movement of seeds, so that the production could be conserved locally. We consider that this proposal is impracticable. It will only depress the prices of seeds considerably thereby hitting hard the agricultural producer and it will be difficult to enforce it with any reasonable amount of success, as there are bound to be leakage and illicit exports. What is more required, in our opinion, is regulation of speculative trading, regulation of prices of oil-seeds as in the case of other agricultural produce by even and calculated flow of supply throughout the year instead of a glut in the market just after the harvest and an acute shortage in the off-season. The system of licensed warehouses which gives the cultivator sufficient holding power instead of having to be in a hurry to sell off his produce and the regulation of future trading in oil seeds, as contemplated by the Indian Oil-seeds Committee, would be more valuable than any drastic embargo on the movement of oil-seeds, as has been contemplated in the suggestion. In paragraph 11 of Chapter II we pointed out that the mills in Madras and the Mysore State

have been benefitted in their competition with the mills in our Province owing to the embargo on the export of oil-seeds in those areas. Unilateral action of this sort by one area against the interests of the other is not desirable, and we strongly urge upon the Government of Bombay to take steps so that there is a free flow of raw materials from these areas without any barriers against export.

39. It was suggested to us that Government should stabilise the prices of oil-seeds as in the case of food-grains. The essential pre-requisite for an effective stabilisation of prices is control over supply and insulation of the area in which they are stabilised. We have already pointed out the impossibility of Government entering the market as a monopolist buyer of oil-seeds and also the undesirability of hindrance on the free movement of oil-seeds. Needless to say it will not be possible for a Provincial Government to stabilise unilaterally the prices in the way indicated in the suggestion.

40. Another suggestion has been that Government should extend the present system of guarantee of 25% of the outlay on purchase of oil-seeds to Co-operative Central Financing Agencies which give cash credits to co-operative societies for purchases. We have already pointed out in Chapter III the danger of this guarantee system and need not repeat it here.

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41. Another suggestion which goes to the very root of the fiscal problem of competition from millers is that there should be demarcation of spheres of production between mills and ghanis debarring mills from producing edible oils. This is more or less on the basis of a similar suggestion which has been made in respect of the handloom industry that mills should not produce cloth from yarn of 20s. and below. Whereas this may be possible in the case of the textile Industry, we feel that it is not a practical proposition for many years to come at least in the case of the oil industry. We tried to collect independently figures to know the total number of expellers, hydraulic presses rotary ghanis and village ghanis operated by bullocks. We have given these in the tables in paragraph 10 in Chapter II. These do not exhaust all ghanis and all mills. The table given below shows that there are roughly speaking 10,000 bullock driven ghanis in this Province.

Statement Showing The Total Number of Ghanis In This Province

Name of the district.	No. of ghanis as supplied by the Mamlatdars for some talukas	No of ghanis in other talukas as estimated on the basis of averages of figures received from the Mamlatdars.	**Remarks.**
Northern Division :			
Thana	172	64	
Ahmedabad	35	122	
Broach	67	38	
Surat	141	52	
Banaskantha	226	nil	
Sabarkantha	309	nil	
Panchmahals	136	27	
Kaira	319	239	
Total	1405	542	
Central Division			
Sholapur	1123	nil	
Ahmednagar	570	356	
Satara	724	642	
East Khandesh	472	342	
West Khandesh	45	6	
Poona	303	363	
Nasik	108	130	
Total	3355	1839	
Southern Division :—			
Bijapur	792	nil	
Belgaum	387	77	
Kolaba	118	nil	
Dharwar	124	108	
North Kanara	152	10	
Ratnagiri	909	76	
Total	2483	271	
Grand total.	7243	2652	

Note :—Thus we may roughly estimate the total numbr of ghanis in the Province to be in the neighbourhood of 10,000.

42. We find that the Food and Forest Industries Sub-Committee of the Provincial Inndustries Committee, Bombay, which carried out a survey in 1947 has indicated figures in respect of expellers and rotary ghanis. These are 303 expellers and 392 rotary, ghanis (page 63 of its report). The average crushing capacity of of an expeller is 5 1/2 tons to 6 1/4 tons daily if it works for a full working day of 24 hours. The percentage of oil each expeller gets from oil-seeds is 42% to 43%. Assuming that each expeller works for 300 days in a year, the total quantity of oil produced per expeller annually would be 693 tons to 787 1/2 tons. For 303 expellers this means a production of 2,09,979 tons to 2,38,612 tons. The average quantity of oil-seeds which can be crushed by a rotary per day of 24 hours is half a ton with the oil crushing index of 40%. In a year of 300 working days a rotary can, therefore, produce, on this basis, 60 tons of oil and the production of 392 rotaries would be 23,520 tons. One ghani produces 16 1/2 seers or even at the maximum half a maund of oil per day at the existing rate of production i.e. crushing 96 lbs. of seeds with a crushing index of 38%. Ghanis work, as already mentioned, from 120 to 240 days, most of them working for the lesser number of days. But even if we assume that they work on an average for 180 days in the year the production of oil bfrom 10,000 oil ghanis in a year would be about 32,000 tons. According to the Food and Forest Industries Sub-committee, only 1,62,000 tons are sold by mills as edible oil. Along with the production of 10,000 ghanis, this adds upto 1,94,000 tons. We must add to this the import of vegetable oils. As will be seen from Appendix 'F' the import recently has been 60,000 tons. The average annual import for the years 1941, 1942 and 1943, as can be seen from Appendix 'F' was 39,700 tons. It is unlikely that all the quantity of 60,000 tons of imported oil enters consumption in the form of oil; some of it might conceivably be flowing into industrial uses or for manufacture of vegetable ghee, etc. We may, therefore, reasonably assume that about 39,700 tons enter the diet of consumers. We have then a total quantity of 2,33,700 tons of edible oil for consumption of the population in this Province. The population figure given in the census of 1941 is 2,08,49,840 excluding areas which have latterly merged in the Province. Assuming that it has roughly increased by 10 per cent since 1941 that is by 20,84,984, the per capita annual consumption of oil comes to 23 lbs. Supposing that instead of the traditional ghanis all the 10,000 ghanis were Haskell ghanis each producing 9/10th maund of oil per day and that each of these ghanis works for 300 days, that is to say, the annual production per ghani is taken to be 270 maunds, then in order to produce 2,33,700 tons of oil we would require 24,198 ghanis. So far we have only 67 Haskell ghanis out of the approximate figure of 10,000 ghanis in the Province. As

it is, the conversion of existing ghanis into Haskell ghanis has been going on very slowly. If it is to be further burdened with extra manufacture of 14,198 ghanis, it would be further retarded. we take into account the desideratum menteionetd by the Nutrition Advisory Committee of 2 ozs. per person per day this would further aggravate the problem. It will, therefore, be disastrous to ban the production of edible oils by mills and to rely on ghanis only for the supply of oil to the entire population of the Province. Apart from the hypothetical question whether the excess number of ghanis could be manufactured within a period of four or five yeas, there is also the question of a very high-pitched organisational ability which will be required to meet the requirements not only of rural areas but also of urban areas situated at great distances from the centres of production. In our opinion, ghanis should primarily concentrate on supply to the villages in which they are situated and an area covering a manageable radius from the centres of production. Mills may continue to supply urban areas where the purchasing power is also higher and where the daily requirements of oil are said to be higher per capita than in rural areas. There has been some increase lately in the consumption of oils owing to the increased prices of ghee and also the comparatively high prices of vegetable ghee as compared to edible oils (Dalda and Vanaspati cost not less than Rs. 2/4/- per seer as against Rs. 1/8/- per seer of groundnut and Rs. 1-10-0 of sesamum and safflower oil). Ghanis would benefit from the slightly increased requirements of oil of villagers due to this factor.

43. It was suggested to us that the raw materials required by the village oil industry and its finished products should be exempted from the levy of octroi and terminal taxes by local bodies. No doubt, these sources of revenue considerably help local bodies. to augment their funds. However, in the interest of the village ghani industry we recommend that Government should persuade the local bodies concerned to provide the necessary exemption to help this industry. The Mamlatdars of the talukas should be empowered to issue the necessary certificates for the benefit of nakawalas testifying that particulars goods are raw materials for and finished goods of the village oil industry.

44. As we have mentioned earlier, the problem of ghanis is in a major portion a fiscal problem if they are to work at a profitable margin. They must first rationalise production saving as much as possible on its cost by mobilising self-help and practising economies. Some of the working costs are, of course, irreducible like

repairs, depreciation, maintainance charges of bullocks, etc. There could be a little saving on the interest on borrowed fixed capital or working capital if loans are advonced either free of interest or at very low rates of interest by Government.

45. As will be seen from the figures in Appendix 'B'' the maximum crushing cost per pound of oil (excluding realisations from the sale of oil cake) in mills using expellers is 8.5 pies and the minimum is 4.1 pies. In the case of mills using rotaries the average crushing cost is 5.8 pies. As against this, the maximum and minimum figures of crushing costs in ghanis per pound of oil excluding the realisation from oil cake are 22 pies and 15 pies. It will thus be seen that the margin between the expeller crushing cost, calculated on this basis, and crushing cost in ghanis is 12.2 pies per pound of oil. The average crushing cost in a ghani being 18.5 pies, the margin between this cost and the cost of extraction in rotaries is 12.7 pies. Except for the abnormal period when the stocks of mill oil cake were frozen and its price was controlled at a flat rate of Rs. 130/- per ton, the normal margin between the sale price of ghani oil cake and mill oil cake when these prices are in a state of equilibrium is, we are told, Rs. 5 to Rs. 10/- per ton of cake. The ghani cake has thus an advantage of roughly .43 to .86 pies per pound of oil over the mill oil cake in price. In a ghani the maximum extraction being 40%, for each pound of oil produced the teli gets 1 1/2 pound of cake; whereas in mills and rotaries the extraction being 42% for each pound of oil the miller gets 1 16/42 pounds of cake. Therefore the advantage which the teli has over the miller in the weight of the cake per pound of oil comes to 5/42 pounds. This weightage has, therefore, to be given to the figures of .43 and .86 pies we have mentioned above. Therefore, the net advantage to the ghani cake comes to .48 and .96 pies. This is to be deducted from the disadvantage in oil crushing of 12.7 pies per pound. After doing this we have the margin of 11.74 pies to 12.22 pies per pound of oil, taking into consideration the realisation from oil cake as the net disadvantage which the ghanis have as against the mills. As between the miller and the teli, therefore, the teli on the whole losses in the cost of production by 11.98 to 12.7 pies per pound of oil. The wholesale and retail distribtors' margin and the cost of transport which amount to roughly 3 pies per pound of oil need not be deducted from this advantage as far as the miller is concerned because the miller with his low cost of production takes a little margin and in any case his price in the market is the ruling price in virtue of the fact that his oil scores over the ghani oil in quantity.

46. The competition being mainly between ghanis and mills situated in taluka or district headquarters it is not unusual that the mills have their own selling depots in which case the wholesaler's and retailer's selling margins are dispensed with. In such cases the above margin of 3 pies for distribution expenses is reduced to 1.8 pies per pound on oil. The analysis given above refers only to unadulterated oils. In practice all oils, we are told, are being adulterated. Adulteration in varying proportions will obfuscate the actual cost of production of pure oil. But assuming that the oils are pure, the above figures will hold good.

47. In order to equalise advantages for the miller and the teli, this margin of say, on the average, 12 pies per pound or 2 annas per seer of oil has to be compensated. In Government Resolution, Educational and Industies Department of June 29, 1948, to which we referred in Chapter III the policy of Government has been laid down in the following terms :—

"The object of the various measures designed to assist cottage industries will be mainly to enable those engaged in them to organise themselves so as to face the competition of factory products *with only such state assistance as may be regarded a reasonable price for the attainment of the social objective associated with cottage industries*". The resolution of the Government of India, Ministry of Industry and Supply, dated April 6, 1948, to which also we referred to Chapter III mentions *inter alia* that "the healthy expansion of cottage and small scale industries depends upon a number of factors like the provision of raw materials, cheap power, technical advice, organised marketing of their produce and *where necessary safeguards against intensive competition by large scale manufacture* as well as on the education of the worker in the use of the best available technique. We quote also the relevant extract from the resolution of the National Planning Committee, "While all possible measures should be taken to strengthen the economic basis of cottage and rural industries by arranging for the requisite finance, providing facilities for securing and storing raw materials and re-adjusting freights. improving marketing technique of production, implements, organisation, etc., *such other protection be given as the Planning Authority may consider necessary and desirable in order to neutralise such disadvantages as may remain*......It is desirable that the State should also encourage and foster such cottage and rural indutries as can with State assistance in the form of provision of finance, improved processes and equipment, research, marketing and other facilities *be in a position* *to produce goods and services at a cost and return comparable to those of other competing methods of production.* The words cost and return' used in this context have to be interpreted in a broad sense so as to include long time as well as short time costs and returns and the indirect costs and returns to society in addition to the costs and returns reckoned in money." Taking these as canons of reference coming as they do from very responsible quarters, we now give below two alternative schemes for assistance to telis primarily, but also to other sections of the village community inevitably.

48. *Cess on oil-seeds and copra.*—

Under section 3 (1) (a) of the Indian Oil-seeds Committee Act, 1946, a cess or an excise duty of one anna on a maund of oil extracted by mills was to be leived by Government of India, the proceeds whereof were to be utilised for amelioration of the conditions of growers of oil-seeds and persons in the oil industry. It was to include along with mills the village ghani industry also. As we have shown in Chapter III not much assistance has so far flowed into this province out of this fund. We propose that a cess of 1/4th anna per seer or Rs. 17-8-0 per ton of oil-seeds and copra crushed in mills using expellers and rotaries should be levied by Government on the assumption that all the 10,000 ghanis will be covered by Co-operative Societies in one year. However, if this is not possible, Government may levy a propotionately lower annual cess with due regard to the funds needed for the assistance to the Societies on the scale mentioned by us later on in this Chapter. A tentative five year scheme is outlined in Appendix I. We have pointed out in an earlier paragraph that there are 303 expellers and 392 rotaries in the Province and that an expeller crushes on an average, if it works full strength for 24 hours a day in three shifts of 8 hours each, 5 1/2 tons to 6 1/4 tons of oil-seeds and that similarly a rotary crushes half a ton of oil-seeds The total crushing in expellers and rotaries is thus equal to 5,92,837 tons. Even assuming that occasionally 10% of the crushing capacity is not utilised the total crushing would amount to 5,35,554 tons. The total amount of the cess would, therefore, come to Rs. 93,37,195/- per year. We also recommend that, if possible, the cess levied by the Government of India on Bombay mill oil to which we have referred above may be given to the Government of Bombay for use in their discretion for the amelioration of the ghani industry This would mean a figure of Rs. 14,593 calculated on the basis of figures of oil production in mills and rotaries of 2,33,499 tons mentioned in para. 42 above. The cess to be levied by the Provincial Government will not be a permanent mechanism. It should be discontinued after the ghani industry is put on a stable and profitable working basis and when it has built up sufficient reserve funds after payment of the loans advanced by Government. Government should take a quinquennial overall review of the progress made by the village oil industry and determine whether the cess should be continued or not.

49. *Registration and Licensing.* ...

We further recommend that all ghanis and mills using expellers and rotaries should be registered and licensed. We have mentioned earlier that, if the setting up of mills has not been banned but only discouraged by Government, the licensing system should also include new mills. The licensing fee should be Rs. 5/- per h.p. or kilowatt used for oil extraction per expeller, Rs. 3/- per h.p. per rotary and Rs. 5/- per ghani per year. We understand that in some districts municipalities have levied a licence fee of Rs. 50/- per ghani. This appeears to be high considering that the present profits, if any, of a ghani are about Rs. 300/- to Rs. 500/- a year. Such municipalities as may have levied a licence fee at this high rate should be advised by Government to reduce it. The licensing system should not work irritatingly. The object of the system should be merely to obtain periodical returns of stocks and production, technological and scientific advance made, rationalisation, extraction percentage of oil, production of other industrial by-products like soap, glycerine, candles, vegetable ghee, hair oils, varnishes, paints, conditions of work, etc. It need not amount to any unreasonable nagging from Government or undue encroachment on the autonomy of the industry. As regards new ventures, though there may be justification for discouraging them, in view of the fact that the crushing capacity is sometimes not fully used by the existing mills, if and when they are started irrespective of whether Government affords them facilities or not, the licensing system in addition to the above may provide for a voice for Government in the location of the concerns, so that Government could carry out its policy of decentralisation of industries. On the assumption that the average horse power of an expeller is 30, a licence fee of Rs. 5/- per horse power expeller per year would amount to Rs 45, 450/- for 303 expellers. Similarly, if the horse power of a rotary is taken to be 20 at the rate of Rs. 3/- per horse power per year the licensing revenue for 392 rotaries would be Rs. 22,520/-. In addition to this, the annual flat licensing fee of Rs. 5/- per ghani would bring a further revenue of Rs. 50,000/- for 10,000 ghanis. The total licensing revenue annually would be Rs. 1,17,970/-. One advantage of the licensing system would be that it will help Government to build up a census of industrial production in the oil industry not only regarding mills but also regarding ghanis every year. It has been universally admitted that an up-to-date periodical census of production is necessary in different branches of industry to keep Government, public and research workers *au fait* with industrial statistics.

50. It would seem at first sight that the entire cess will be shifted by mills to consumers of oil. We do not refute that the cess will be shifted, but we feel that the entire amount will not be incorporated in the oil prices because mills do not manufacture merely oils, but also many articles from oil-seeds like vegetable ghee, soap, oil-cake, hair oils, lubricants, candles, paints, varnishes, etc. Even if the cess is distributed between oil and oil-cake only, only 42% of it might come in oil, whereas the remaining 58% would go in the oil-cake. The consumers of mill oil cake are mostly wealthy agriculturists who utilise irrigation for cultivation like sugar-cane growers, paddy growers, etc. There is also as we have seen, a normal margin between the mill oil cake and the ghani oil cake of about 5 to 10 rupees per ton. So, even if a portion of the cess is incorporated in the oil cake it would not make a great difference. Even if the entire cess is incorporated in the oil price it might raise it by only 7 pies per seer at the most if the cost of production otherwise remains the same as at present. But we feel that the cess will get dispersed in many commodities apart from oil and oil cake and the fraction incorporated in each would not be very considerable. One of the canons laid down in the resolution of the National Planing Committee is as follows :—

"All measures of a protective nature other than or in addition to the grant of a subsidy which are required for the due achievement of the purposes mentioned above (which were already quoted by us earlier) should be such as not to place the mechanized industries of any Province or State at a disadvantage *vis-a-vis* their competitors in other Indian Provinces." This is a very sound principle. *If* as a result of the levying of the cess, it is found that it places mills in our Province at a comparative disadvantage *vis-a-vis* mills of other Provinces from which they are experiencing competition in oil though practically not in oil cake, Government should not hesitate to levy a corresponding terminal duty on the import of such oils which would neutralise the disadvantage of our mills. This will, if anything, bring further revenue for assistance to the ghani industry in our Province.

51. Mr. Ambalal Sarabhai who recommended a draft resolution to the National Planning Committee before the resolution to which we have referred above was passed stated therein as follows ;—

"If the State decides to encourage any cottage industry by giving aid in the form of subsidy or in any other form incurring expenditure on the grounds of national wealth, we are of opinion that the amount required should be found from the general revenues or by imposition of a direct or indirect tax but not by imposition of a levy on the article manufactured on factory scale for giving benefit to the similar article on cottage scale. If the cottage industry is to be developed at the expense of the State, the consideration for such assistance would be the good of the community and as such the burden of taxation should fall on the community on the criterion of taxable capacity and not on the industrial section which may be competing with a similar product of the cottage industry."

52. This would militate against our proposal of a cess, but we hasten to point out that in the resolution which was finally adopted by the National Planning Committee, though many other portions of Mr. Ambalal Sarabhai's draft resolution were adopted, this particular portion was not retained. Our proposal for the levy of a cess on the oil mill industry should not, therefore, be negatived merely on the principle propounded by Mr. Ambalal Sarabhai. At present a cess has actually been levied by the Government of India on the production of oil by mills. There is also a cess on sugar-cane which was recently levied by the Government of Bombay on sugar-cane crushed in sugar factories. The cess on oil-seeds which we have proposed, therefore, is not a novel or cataclysmic departure from the exitisng practice. It has been proposed for the good of the rural community not only of the telis themselves but also of agricultural producers and consumers in villages, as will be clear from the use of the cess, which we will explain later on. It need not, for the reasons given above, paralyse production in mills. We have as much the interest of the oil mill industry at heart as that of their unfortunate rural colleagues—the ghanis. The scheme which we give below will make it clear that we have no desire to liquidate oil mills. They manufacture important consumer goods apart from oils and oil cake which are needed in still further larger quantities by consumers they will still have enough scope for supplying oil to urban dwellers and to supplement the inadequate production by ghanis to satisfy the portion of the unsatisfied demand even in rural areas. Even 10,000 Haskell ghanis can annually meet the oil requirements of only 1,08,00,000 persons as against a rural population of roughly 1,44,78,287 adults. What needs to be prevented is the encroachment on the legitimate market of ghanis and a local supply of essential food requirements which enter the daily diet of villagers whose purchasing power is far too low as compared to that of urban dwellers. Our recommendations which will come hereafter

should, therefore, be read in the context of what we have said here. We repeat once again that large scale industries are as much required for economic betterment in our country as small scale industries. Large scale and small scale industries are the systole and diastole of the giant heart of the nation which has to pump industrial pressure at full speed to step up production and to increase the per capita national income both in terms of money and in terms of real wealth.

53. *Sales tax:*

In the Schedule of exempted goods under section 7 of the Bombay Sales Tax Act, entry No. 48 exempted from the tax from 1-10-1946 all edible oils pressed in ghanis by human or animal agency. When the Act was repealed and re-enacted with effect from 1st April 1948 this entry was changed to "all edible oils except when sold in sealed containers." In the new Sales Tax Act, however, all edible oils have been removed from the Schedule of exemption. It has been strongly represented to us that in order to make up the margin of 2 annas per seer of oil to which we referred earlier all edible oil produced by ghanis which will be covered by our scheme of co-operative societies should be exempted from the payment of the sales tax. We pass on this recommendation to Government for implementation. This action would not mean a radical departure from the past. From 1-10-1946 to 1st April 1948 ghanis did enjoy this concession. This recommendation, therefore, amounts to a restitution of the old position and will we hope be agreed to by Government, though it means a slight loss of revenue. If this is agreed to by Government, at the rate of Rs. 1/8/- per seer of groundnut oil the sales tax would be 9 pies per seer of mill oil. That would still leave a margin of 15 pies per seer to be made good. Incidentally, the exemption of ghani oil from the sales tax will help the rural consumer who has a natural preference for ghani oil.

54. *Co-operative Societies:*

We recommend that co-operative societies should be established in villages consisting not only of producer telis but of agricultural producers of oil-seeeds and consumers of oil and oil-cake. We have sufficiently explained in Chapter III why merely societies of a few producing oilmen will not solve the problem. The problem of securing raw materials can only be radically solved when there is an active association of the oil-seed producers and ghaniwallas in one co-operative unit. Since we have proposed earlier and will propose shortly considerable assistance for the ghani oil industry, it stands to reason that the ultimate benefit of assistance must not only go to the telis but also to the generality of the village community. We have mentioned how telis are not an exception to the fraud which is being committed by adulteration of costlier oils with cheaper oils and of edible oils with white or spindle oil. This must stop and therefore along with producers of oil-seeds, consumers must also be members of this co-operative organisation. This is a *sine qua non* of the re-orientated pattern of the village industry which we are outlining below and all assistance should be subject to the fact that the co-operative organisation *is representative of all these classes in the village community.* Otherwise we recommend that whatever assistance Government has been giving so far may be continued, though we have already expressed that, as far as we can see it, it is more or less a waste of funds. The co-operative society for its registration must have at least two ghanis. It can conceivably include even 20 to 25 ghanis or in a compact area at taluka headquarters where there are as many as 105 ghanis as at Pandharpur all these ghanis should be included. No hard and fast regulation need be prescribed for the maximum number of ghanis which could be covered by a single co-operative society. The number of societies should also not be too high. There are about 10,000 ghanis in the Province. As we have seen, these ghanis by themselves will not be able to cater to the requirements of all the villagers at the present rate of consumption of 23 pounds of oil per capita per year, but there need not be much hurry in covering the entire Provincial area immediately. Our first concern should be to help in establishing the existing 10,000 ghanis on a stable and profitable basis. If more ghanis are required, they could be manufactured and established in the course of time. The number of societies must not be too unwieldly because they cannot then be efficiently supervised by peripatetic Government supervisors. Roughly, a supervisor will be able to supervise adequately 12 societies. We understand that Government is already contemplating appointment of 60 supervisors. These supervisors should have a thorough training in the technique of production of oil in ghanis and its marketing. A tentative number of societies could, therefore, be fixed at 500 to 600. This would take into consideration the geographical continuity and compactness of the areas covered by the centres, so that they may be homogeneous units of production where all sections of which they are composed can be in frequent communion and can also take an active interest in participation in the affairs of the society and in the democratic control of its management. Each society must certainly cover all the telis in the area of its operation and *at least* 50% *of the seed producers and* 50% *of the consumer families to start with.* It must have an open door policy with a reasonably low face value of shares, so that the remaining 50% will also be encouraged to join it. After its formation the

Society will judge how much oil is required for the entire village community in its jurisdiction. In view of the fact that we are not contemplating one society per village, but we are envisaging a scheme where one society would cover a compact zone of contiguous villages, it will cover more than one village. All the ghanis of the society must be converted into Haskell ghanis expeditiously. Government should continue its present arrangements for the free servicing of Haskell Ghanis. Assuming a 40% extraction of oil it can easily calculate the quantity of seeds required for crushing for the annual oil requirements in its area of operation. This entire stock must be reserved by the oil seed producer members of the society for the benefit of the society and the village community. As an initial encouragement for the formation of the societies, Government should give a grant of Rs. 600/- to each society for defraying management expenses. This would mean an outlay of Rs. 3,00,000/- for 500 societies. Until a society is able to show a decent profit this may be given as an annual grant, if it continues to be *bona fide* in the conduct of its business. If our scheme is accepted in toto we see no reason why a society should not prosper even in the very first year or at the latest in the second year of its inception. This grant should be discontinued when sufficient profit has been made in a year.

55. Each such society should be eligible to a maximum loan of Rs. 600/- per ghani returnable in 10 years and free of interest for converting existing ghanis into Haskell Ghanis, for buying better equipment, more efficient bullocks and other apparatus of production. The repayment of the loans should be in equated monthly instalments, the first instalment commencing from the month subsequent to the month in which the equipment is supplied. It does not mean that each society should be given this maximlm loan. Some societies may already have Haskell ghanis, 67 of which have so far been distributed. Similarly, it may be that it is not necessary to replace those bullocks which are quite efficient. What we have indicated is the maximum which should not necessarily become a flat rate irrespective of the requirements of a particular co-operative unit. For 10,000 ghanis this would mean at the maximum loans of Rs. 60,00,000/-. Decorticators costing about Rs. 2,500/- each would also be helpful. We have not made provision for loans separately for this because we feel that the aggregate loans of Rs. 60,00,000/- should be able to cover this, as there will be savings from the maximum amount in the cases of many societies.

56. Each society should have a godown or a warehouse for the safe storage of seeds and finished products. For this purpose a loan of Rs. 1,000/- per ghani returnable in 10 years may be given

bearing in mind that this would be the maximum and not a flat normal. This would mean loans of Rs. 1,00,00,000/- in aggregate. These loans should be repaid in equated instalments annually, the first instalment starting in the year after the advance of the loan. They may be given free of interest in the first two years and thereafter interest at 2% may be charged. Alternatively, Government should construct these godowns itself and run them as its Licensed Warehouses through its own staff. Thereby the holders of Warehouse receipts, who are members of the Society, will not have any opportunity of tampering with the stocks.

57. For the purchase of seeds, we have seen that a total outlay of roughly Rs. 16,875/- per ghani at the average rate of Rs. 25/ per maund of oil-seeds for 675 maunds for 300 working days each day crushing 2 1/4 maunds of oil-seeds would be required. As we have guaranteed that there is no chance of the supply being encroached upon by competing mills, as producers themselves will be members of this organisation, all that is necessary is that the producers should store the oil-seeds in the society's or government's godowns upto their capacity and the excess in their own houses. The storage should, however, be scientific to avoid caking of the ground layers and destruction by insects, rodents, etc. For this, full technical assistance should be provided by the Department of Cottage Industries. The society's godowns should be recognised and run by Government *through its own staff* and *under its control* as Government, Licensed Warehouses under the Licensed Warehouses Act. Producers who have stocked the seeds in these godowns will then be in possession of warehouse receipts which could be used by them as documents of title for getting advances against the goods from financing agencies. There will, therefore, be no question of the producers having to be paid in lump sums for all their produce kept in the godowns, as the question of holding power will thus be solved. In view of this and as seeds will be circulating capital, we consider that an amount of Rs. 3,500/- per ghani should be advanced as a loan by Government to the society for payment to its producer members for the oil-seeds purchased by it for oil crushing. The loan should be returnable in 12 equated monthly instalments starting from the month next after it is given. This would involve an amount of Rs. 3,50,00,000/- for 10,000 ghanis.

58. To facilitate the problem of transport we recommend that Government should advance a loan of Rs. 10,000/- for one motor van or lorry to a group of 10 co-operative societies. For 500 co-operative societies this would aggregate to Rs. 5 lakhs. These loans should be returnable within a period of five years in monthly equated instalments, the first instalment to start in the month following that in which the loans are advanced. They might be advanced free of interest.

59. If all these loans totalling to Rs. 5,15,00,000/- for 10,000 ghanis are to be given free of interest, it would mean foregoing interest of the value of Rs. 15,45,000/- at the current borrowing rate of 3%. As we have seen above, the cess on the oil-seeds crushed in oil mills, the licensing revenue and the portion of the cess recovered by the Government of India from the mills in our Province would bring in a considerable revenue, roughly Rs. 94,69,758/-, and this interest as well as the temporary grant of Rs. 3,00,000/- for management expenses and the bonus to which we refer below till the concerns become profitable can be easily met from this source.

There would still be a margin of 15 pies per seer of oil between oil mill and ghanis which remains to be filled up. We suggest that a bonus of one anna per Bengal seer of oil may be given to the co-operative societies of the pattern we have given above. On the basis of 270 maunds produced by one Haskell ghani working for 300 days a year, this would involve a cost of Rs. 675/- per ghani or Rs. 67,50,000/- for 10,000 ghanis. Certain conditions should, however, be annexed for the eligibility of the society to this bonus.

60. As in the case of the loans, the following conditions should be fulfilled collectively:

(1) that all societies should employ Haskell ghanis or if this is not possible immediately in view of the inadequate production of these ghanis that they should give a written undertaking that they will employ them within a course of 8 months at the latest;

(2) that the extraction of the oil from the ghanis should not, in any case, be less than 38 per cent. and should be carried on hygenically;

(3) that the ghanis must be worked for 300 days in a year;

(4) that the oil produced must not be adulterated with cheaper oils or with white or spindle oil and should be of agmarkable quality.

Such other reasonable conditions which Government may think fit in its discretion may also be annexed.

The subsidy should be disbursed at the end of the year after very careful reference to the daily registers showing the working of the ghanis.

61. We mentioned in para 45 above that a margin of 2 annas or 24 pies per seer of oil including realisation from oil cake has to be made up to equalise the advantages in crushing cost between ghanis and mills. From the proposals we have made above it will be seen that this has been provided for. The Sales Tax on mill oil at half an anna in the rupee would cover 9 pies per seer of oil. The bonus to the societies would cover a further 12 pies per seer of oil. Three pies still remain. These will be covered if 42 per cent. of the Cess we have proposed is reflected in prices of mill oil. Even if this does not happen the indirect benefit of interest-free loans, grant for management expenses, etc., will cover up this margin. We have pitched the scale of the assistance at that level at which the advantage of mills and ghanis are equalised taking care to see that there is sufficient inducement and scope left for self-help and productive effort in the co-operative societies. We have taken care to see that the assistance should not be such as would degenerate into charity and demoralise the recipients thereof into undesirable complaissance and lotus-eating. Every year a *detailed* report should be sent by the Department of Cottage Industries to Government explaining what productive use has been made of the loans and bonus and whether the assistance given by Government has been properly used. The report should indicate facts and figures regarding profits and reserve funds built up by the village oil industry to enable Government to determine when the protection given could be reasonably withdrawn after the units protected can stand on their own legs without adventitious aid.

62. A question might be raised that in some areas the Societies might not get adequate oil-seeds and that normally these are imported from other surplus areas. From the figures given by the Director of Agriculture and the fact that oil-seeds are normally grown as a mixed crop with cereals and millets it will be seen that this difficulty is not unsurmountable. In every district edible oil-seeds are grown. It may be that in some districts they are grown in large quantities and in some in small quantities. If there is a shortage of oil-seeds in any local area, a co-operative society should not hesitate to communicate its requirements to the society in the surplus area which will give first preference to the society in the deficit area for the release of its surplus stock rather than to mills and other outsiders. If there is still surplus, it may be sold to mills directly by the co-operative societies instead of through merchants and brokers. This will help a healthy co-operation between mills and these co-operative societies. If there is still a surplus it could be sold to the best advantage of the societies in the open market either in

the district or in terminal markets at the best available prices which will be disclosed by the better marketing intelligence, which the societies are bound to get through the Provincial Co-operative Marketing Society, etc.

63. As far as the manufacture of oil cake is concerned we are told that the annual demand for manurial purposes is 1,33,365 tons in this Province. The demand for oil cake for cattle feed is 46,810 tons. Assuming that our co-operative societies of the pattern given above employ Haskell ghanis, they would be manufacturing per ghani 54 seers of oil cake daily i.e. in 300 days they would manufacture 16,200 seers or 405 maunds or 14 1/2 tons of oil cake per year; so that 10,000 Haskell ghanis would produce 1,45,000 tons of cake annually. It will be seen, therefore, that out of the total demand for manure and cattle feed of 1,80,175 tons a considerable portion could be supplied by these ghanis leaving still some portion for supply to mills. As a matter of fact, we feel that with the growing needs of agriculture and the greater emphasis on fertilizers, the mills will have a wider field than that of 35,175 tons shown by this calculation.

64. These co-operative societies should be affiliated to district sale and purchase unions and through them ultimately to the Bombay Provincial Co-operative Marketing Society and also to the District Industrial Co-operative Associations, so that they would get the benefit of pooled knowledge of scientific technique, marketing intelligence, etc. Out of the maximum help which we have indicated above that Government should give, some portion could be easily made available by Co-operative Central financing agencies, saving to that extent heavy leaning on Government. Government should first ascertain how much out of the assistance could be given by these agencies at economical rates. They should not charge unduly high rates of interest, but finance these societies in a true spirit of co-operaton rather than of profiteering, Government should supply the deficit of the finance. All the loans, which we have mentioned above, should be adequately secured by a floating charge on or mortgage of all the moveable and immovable assets of the co-operative society and if need be on or of a small portion of the lands and assets of the individual members thereof. This is necessary because the amounts involved are large and the public exchequer should not be in jeopardy.

65. We expect that with this assistance co-operative societies should be able to make decent profits and build up sufficient repaying capacity for the loans and also a reserve fund for the improvement of the industry and within a few years they should have no need to depend on Government for assistance, but could

carry on with their reserve fund. Till the loans are repaid and a strong reserve fund is built up, they should not declare high dividends. Till this is done we suggest that there should be a limitation of dividends upto a maximum of 3 1/2 per cent. The telis should get their wages for the operation and supervision of the ghanis. The equipment and the capital should be owned by the society. The telis should be credited in the Society's accounts with the value of the ghanis, bullocks and other apparatus taken over by the Society and shares of that amount should be allotted to them. They should also get a share in the profits of the concern in addition to their wages of operation and superintendence. The wages should be remunerative and should keep the telis in a stage of reasonable economic comfort.

66. The oil and the oil cake produced will be primarily for the benefit of the members i.e. the entire village community which comes in the society's jurisdiction. Where there is a scope for higher production, the excess could be sold as mentioned later on. There should be no aims of profiteering and the price will include only such a margin as would be necessary for the efficient conduct of the society and for building up a strong reserve fund and repaying capacity to return the loans of Government. We expect that the oil thus produced will be considerably cheaper than mill oil and the benefit of low prices should be given by the society to the village community. Oil that is in excess of the community's requirements should be sold first preferentially to those societies of other village communities whose production due to inadequate supply of local oil-seeds may be slightly in deficit of the requirements. In such cases the supply price should not be fixed at a very high level, but should incorporate a narrow profit and the cost of transport. If any oil still remains after meeting these requirements, it may be sold in urban areas to consumers at the full economic price *i.e.* at the same price as that of oils from the mills without sacrificing any portion of the legitimate profits because in these areas the purchasing power is relatively higher than in villages.

67. In the scheme which we have contemplated the oilseed producers will get as much benefits as the telis. At present regulated markets have been set up by Government in different districts with market committees which are charged with the duty of preventing exploitation of the producers by purchasing merchants through unauthorised deduction, allowances, etc., so that the producers get the full market price for their produce. In our scheme, as the producers will be members of the co-operative societies and their produce will be primarily for the benefit of themselves as well as other consumers of the village community,

there is no problem of exploitation. According to the Bombay Agricultural Produce Market Act and Rules when a regulated market is set up the commodities regulated have to come up for sale to the distantly situated 'market yards'. The co-operative societies which we have in mind will safeguard the interests of their producer members and the sale to such societies by their members need not be in 'markeet yards'. This will save unnecessary transport costs. The oil-seeds should be brought straight to the Society's or Government's godowns instead of carting them to the market yards.

68. If after producing primarily for the demand of the village community, there is still time left for further production, non-edible commercial oils may be prepared for supply to mills. In such circumstances more oil could also be produced for the manufacture of soap. A scheme for the economic manufacture of bar soap for washing clothes not at a considerable cost is given in Appendix 'G', which may be gainfully pursued. If seeds in shells are stocked instead of kernels, small articles like toys, boards, etc. could also be produced after decortication. This does not actually exhaust the whole list of subsidiary industries which could be undertaken. The criterion should be that any subsidiary industry which is selected should not involve a disproportionately high cost or any difficult economic or scientific process outside the reach of the competence of a rural co-operative society.

69. The oil produced should be standardized and graded, if there is scope for commercial sale to urban areas, etc. It should be agmarked after the refraction index, colour, specific gravity, saponification value, and contents of iodine, mucilage, free fatty acids, etc. are determined.

70. A question might be asked whether all this elaborate pattern of co-operative societies could not be avoided and instead we should have a very simple scheme wherein villagers will take their oil-seeds for crushing to the telis and obtain oil and oil cake after paying them their crushing charges. It might be said that this would dispense with cost and accommodation problems relating to storage of seeds, large circulating capital, overhead costs, etc. As we have seen in our analysis in Chapter II, this system does prevail in many villages, but it has not solved the problem of the telis. There is the unconquerable temptation of selling seeds to the village merchant to get liquid cash soon after the harvest. The quantity of seeds stored for domestic requirements is not adequate nor is the quality upto the mark because seeds of the best quality are sold to the merchant. Secondly, in some areas there is a surplus of oil-seeds and in others there is a deficit. In the latter areas there will not be sufficient seed left with producers after they sell to

the merchant. As we have shown in paragraph 13 in Chapter II, rotaries compete with telis even in this respect by charging lower rates and crushing the material more quickly. Therefore, though ostensibly this simple scheme would appear attractive, in effect, the theoretical optimism has not been borne out nor will mere dry propaganda in the villages that producers should conserve their seeds rather than sell them to merchants be effective in the present economic state of villagers.

71. We summarise the advantages of the scheme which we have outlined above:

(1) The Co-operative Society will act as a buffer-spring wherein the opposing interests of oil-seed producers, telis and consumers will be neutralised and all these sections will benefit conjointly.

(2) As the godowns of the co-operative society will be treated as licensed wherehouses under the Licensed Warehouses Act, there will be no hesitation on the part of the seed growers to stock their seeds in these godowns, as they can get liquid cash from banking institutions on the authority of the warehouse receipts which are documents of title to goods. The nexus with the village merchant who is at present the monopolistic buyer of the producer's goods and exploits them by giving them low prices on the ground of unduly exaggerated defects, refraction, etc. will be terminated Consumers will also benefit by getting a commodity which enters into their daily diet and that of their cattle, not at profiteering rates, but at reasonable rates within their purchasing capacity.

(3) There is rationalisation and optimum utilisation of capital both fixed and circulating.

(4) There is no danger of under-production. If there is over production, it is a calculated over production, which only brings more revenue by supply at full economic rates to urban dwellers.

(5) Middlemen are eliminated not only as far as producers are concerned, but also at the stage of sale of finished commodities. The producers, therefore, get the full legitimate price and the consumers their surplus.

(6) The public exchequer which has already an inelastic revenue and other heavy commitments of post-war reconstruction is not over-burdened as the funds needed are not an encroachment on public revenue. The mills also will not suffer from the Cess if it is shifted in minute fractions in the various categories of commodities produced by them. The fracton entering into a single commodity will not be great the consumer thus is not taxed unduly by having to pay too much for the commodities he buys. The figures of assistance for 10,000 ghanis given above are

maximum figures. In actual practice perhaps the outlay would be much less than the total loans of about Rs. 5 crores. They would perhaps amount to about Rs. 2 to 3 crores. Recourse could be had to the market where there is a considerable plethora of loanable funds. Government would thereby be mopping up surplus purchasing power and solving partly the problem of inflation.

(7) The subsidy element has been carefully bound up with essential conditions. It will only mean higher productive effort and not engender in the recipients thereof complaissance, which is out of place in an active enterprise.

(8) Loans are adequately secured and are returnable. The pitch of the loans is such as will generate in the societies automatic repaying capacity as they are being used.

(9) Such a pattern of co-operative societies will create a co-operative commonwealth in the true sense of the word. Government's careful supervision and annual review is undoubtedly necessary to check the proper application of the amounts given as subsidies or loans, but subject to *bona fide* and honest conduct of the enterprise, the essential autonomy of the society must be respected.

(10) By co-ordinating different societies in a federal structure through Sale and Purchase Unions and District Industrial Associations and ultimately to the apex Co-operative Marketing Society, the whole pattern will be a closely knit one.

(11) In the course of time when sufficient funds are built up the co-operative societies will form a nucleus round which many other activities could be gathered, for instance, other owners of rural industries apart from telis and producers of other agricultural goods apart from oil-seeds could also be included within their scope.

72. We give below an alternative scheme for the development of the village oil industry though technically it is not a cottage industry in the sense that production will not be carried on in the house of the owner, that there will be more than 9 persons employed, that there will be use of power and machinery and the capital invested will exceed Rs. 30,000/-. We feel that there is sufficient justification in transcending the terms of reference of our Committee in view of what Government has stated in its resolution No. 8001 (a) in the Education and Industries Department, dated June 29, 1948. Government said therein that "Government will extend its programme of electrification to rural areas and subsidize, where necessary, the purchase of suitable equipment required for the introduction of mechanisation." With all the advantages given above, the inexorable fact remains that the daily intake of oil-seeds

and the daily production of oil and oil cake from a ghani are inadequate. Witness for instance the average crushing capacity of a Haskell ghani of 180 pounds and production of oil of 72 pounds as against that of a rotary of half ton and of an expeller of 5 1/2 tons to 6 1/4 tons. We feel that while the scheme of co-operative societies detailed above is tried by Government in some areas, as a parallel effort, a scheme of expellers which we give below may also be tried, which would give Government in the course of a year or two a comparative idea of the benefits of each and enable it to decide from the practical results achieved as to which it should pursue subsequently. We are told that the minimum economic unit for production from expellers is two expellers. The cost of two expellers and other accessories at present day prices is as follows:—

	Rs.
Two expellers	45,000
One motor (40 H.P.) working on oil engine with 80% load ...	15,000
One elevator	1,000
One filter	1,000
Building for storage of machinery, raw material and finished products, 50' x 30' with a struss 14' in height ...	30,000
Boiler	2,500
Main drive, shafts, belts ...	1,000
Installation charges	1,000
	96,500

or roughly Rs. one lakh.

73. The crushing capacity of two such expellers working 24 hours a day in three shifts of 8 hours each for 300 days will be 3,300 tons. At the rate of 25 rupees a maund this means a cost of Rs. 23,10,000/- on seeds. The oil produced with an extraction of 42% per expeller would be 1,386 tons per year. Assuming an average consumption of 20 pounds of edible oil per adult per year, this quantity of oil would be enough for the requirements of 1,52,232 adults. Assuming that on a rough average, there are three adults in an average family, it would mean that the two expellers with optimum utilisation would produce oil for the requirements of 50,000 rural families. Even if each family were to subscribe to a share of two rupees each it could bring in an amount of rupees

one lakh for the capital cost, an amount identical to that we have detailed above. We recommend that in a few districts at suitable places Government should, as an experimental scheme, launch an expeller enterprise on the following lines:

74. Shares of the minimum denomination of 8 annas may be floated by this concern. Each shareholder will have one vote in the deliberations of the corporation. In view of this, it is not necessary to fix any maximum limit for the holding of shares by any individual. Assistance from Government will not ordinarily be required for capital cost. If at all a very negligible amount of a few thousands of rupees becomes necessary, Government may advance it as a loan charged on the assets of the corporation. Telis, agricultural producers, not only of oil-seeds but of other commodities also and non-producers like agricultural labourers will all be eligible to become members of such corporations and all will have an equal opportunity and right of contributing to the deliberations, as envisaged in the scheme of co-operative societies. There should be no difficulty in making oil-seeds available to this corporation. Supply of oil-seeds will be on the same lines as in the case of the scheme for co-operative societies above and the corporation's godowns will be treated as Government licensed warehouses.

75. As villagers on the average are not conversant with the technique of production of oil in expellers, Government should select some leading members of the corporation for undergoing training as apprentices in selected mills. If the mills are tactfully approached we do not think they will refuse to impart the requisite technical training. If, however, they refuse, there will be scope for training through the engineers of Government's Department of Industries. Technical training and training in business management are important matters and Government should bear the cost of such training which will not be much and give it as a grant to the corporation. The corporation may be given loans for the purchase of two or three motor lorries to facilitate transport as in the case of the co-operative societies above. This will come to about Rs. 20,000/- to Rs. 30,000/- for each corporation.

76. The teli will be given a very decent and remunerative wage and will be maintained in a very good state of economic comfort. The concern will not be run merely on profitable lines and all the advantages of supply at cheap rates with due interest of the corporation at heart will be available as in the case of the scheme for co-operative societies. Surplus production will be sold at fully remunerative prices. As far as this corporation is concerned, it will need no protection from the oil mills at all. As a matter of fact, it will be at a considerable advantage than mills which are

inspired more by a profit motive. The corporation's real interest will be production and sale of oil and oil cake and other commodities at a cheap cost to its own members who rank first in the order of preference and then others. No cess should be put on the mills, nor any subsidies given for the production of oil and oil cake, as in the scheme for a co-operative ghani enterprise. The main problem in such a corporation will be finance for working capital, which will make heavy demands on its fund, coming as it does to the tune of Rs. 23,10,000/-. As this is circulating capital for the whole year and not used up in the business in one lump sum in a month, it would be reasonable to calculate the initial requirements at about two lakhs of rupees. It is likely that the shareholders, once they are apprised of the benefits flowing from the scheme will pool resources of more than one lakh of rupees and they might be able to invest some funds in working capital also. In case this does not materialise, Government may have to give loans to the corporation. Such a loan may be given free of interest in the first year and at an interest of 4 per cent from the second year till full repayment. The loan should be returnable within a period of three years in equated monthly instalments, the first instalment starting in the month following that in which the loan is advanced, and should be secured on all the movable and immovable assets of the Corporation by creating a floating charge or a mortgage. Such a corporation will be able to produce also huge quantities of oil cake for manure in the distribution of which preference will be given by it to its more needy and poor members. Manufacture of other commodities like soap, paints varnishes, hair oil, lubricants etc. could all be added to this concern as it develops sufficient stability. If Government declares its zeal in this scheme and its officers carry on adequte propaganda and explain it fully to rural families, we see no reason why such corporations could not be set afoot in many districts of the Province. There are 23 districts and in each district even if we have one such corporation the results would be very encouraging.

77. Biological progress is by gradual evolution which is a process from simple to complex and from homogeneous to heterogeneous. In that process there is also a conflict of varying efficiencies, the bigger fish swallowing the smaller fry, etc. In industry also there has been a similar process of evolution. From production for the satisfaction of one's own wants, thereafter those of the family, thereafter those of the community, thereafter those of zones of more than one village, then those of the country and then those of persons in other foreign countries. The range has been from home or cottage production to production for the international market. There should, therefore, be no hesitation in advancing from the individual teli to either telis with other sections of the community

congregating in a co-operative enterprises or in an essentially democratic broad-based corporation of the type we have given above. Rationalisation is the key-note of modern industrial enterprise and large and mass scale production of the type we have envisaged by the corporation above will be a step in the right direction. It has better chances of competing with mills than a ghani enterprise even of the co-operative pattern recommended above. Such corporations will also have to be licensed and supervised and all paternal care and guidance and sound advice should be given by the State without infringing their essential autonomy. Shakespeare said :—

> "for 'tis the sport to have the enginer
>
> Hoist with his own petar".
>
> (Hamlet; Act III; Scene IV).

If there is encroachment by mills owned by a handful of wealthy persons either in rural or urban areas, it has to be sufficiently counteracted to the maximum advantage of the village community. It can be done, in our opinion, more effectively by a mass production device and an enterprise run by machinery than by the languid production of ghanis. It should be noted that all that we have copied in the corporation's production technique is the mechanisation aspect. We have not copied its vices. There is no scope for the mal-practices which obtain in a dividend-hunting plutocratic enterprise. Our corporation, to repeat, will be a broad-based institution. It will have an open door policy to all members of the rural community. Everybody can become a member. It should not be impossible for a rural family, even that of agricultural labourers, to produce 8 annas to buy a share giving the right of one vote. The system will not be of one share one vote, but *one man one vote* irrespective of the face value of the shares owned by him. There is no danger of such a democratic corporation ever becoming a monopoly of a few plutocrats. There is a prospect of a very handsome profit, but this will all be devoted to the economic betterment of the villagers themselves. Re-orientation of policy and better realisation of the most effective methods of solving the problem of the rural masses is necessary. Such a corporation will be the most effective remedy against the competition from large scale enterprise. It should be at the same time most economical to the public exchequer. We need not make a fetish of any ideology. If for instance the problem of the rural areas can be solved more efficiency by adoption of mechanization, mass production and 'hoisting the enginer with his own petar, there should be no hesitation to adopt such methods rather than cling to obsolete methods of production simply because they have an ancient heritage.

78. Whether Government adopts the scheme for a co-operative enterprise or that of the broad-based democratic corporation, which we have given above, we are satisfied that both these schemes will in the words of the Government Resolution referred to in para. 47 earlier in this Chapter "assist cottage industries, enable those engaged in them to organise themselves so as to face the competition of factory products with only such State assistance as may be regarded as a reasonable price to the attainment of the social objective associated with cottage industries".

79. Both these schemes will, in the words of the Resolution of the National Planning Committee to which also we have referred in the same paragraph, place the rural oil industry "in a position to produce goods and services at a cost and return comparable to those of other competing methods of production".

80. We look forward to an early adoption of these schemes by Government. It would be interesting to try both the schemes simultaneously. The areas of jurisdiction of the two schemes should not, of course, overlap.

81 The Physiocrat economist, Dr. Quesnay, said before Adam Smith published his Wealth of Nations. "*Pauvres paysans pauvre royaumme*" i.e. "a poor peasantry, a poor kingdom." The schemes which we have given above are designed to secure the maximum welfare of the rural community. The popular Government in this Province has repeatedly indicated its solicitude in the rehabilitation of displaced cottage industry workers and of the rural masses generally. What we have proposed is in conformity with the policy of the Provincial Government, the Government of India and of the National Planning Committee. If Government feels that the schemes involve an expenditure which is outside its reach—though we see no reason why this should arise in view of the fact that the funds required for the assistance will not be an encroachment on the public exchequer—it should at least take up a few units of co-operative societies and expeller corporations of the pattern described above and work out the schemes intensively. We repeat again what we have said in Chapter III that it is better to focus adequate help on a few *bona fide* concerns deserving of help from Government rather than dissipate the same sum over a larger number of concerns which individually do not get adequate assistance, fail miserably and jeopardise the public exchequer without showing productive results. As the Latin proverb goes "Fecunditor est culta exiguitas quam magnitudo neglecta", *i.e.* "a little field well cultivated is more productive than a large one neglected."

We have framed our schemes in such a way that it should be possible for Government to help all the 10,000 ghanis covered in 500 co-operative societies and even start a few expeller corporations owned by the generality of the rural population in selected zones. Vive les paysans! Vive le marshand d'huile!

CHAPTER V.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

We summarise below our findings and the recommendations we have made in Chapters II, III and IV of our Report.

Chapter II :

There are approximately 303 expellers, 392 rotaries and 10,000 country ghanis in the Province. This includes figures for Sabarkantha, Banaskantha and Dang Districts but not Baroda and Gugarat States and the Deccan States which have been merged latterly in the Province (para. 41).

Mills in Bombay Province are experiencing competition from those in Mysore State and Madras Province, especially as in these two areas there is an embargo on the export of oil seeds which has depressed the prices of raw materials there. The cost of crushing seeds in these mills is also reported to be considerably lower than that in mills in our Province being about Rs. 26 to Rs. 28 per ton of seeds crushed as against Rs. 30 to Rs. 40 per ton of seeds in our mills. (Paras. 11 and 12.)

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Though some mills using expellers and rotaries in Bombay Province are working at a loss owing to difficulties in securing raw materials, discontinuous supply of power from diesel oil and steam engines, competition from outside mills, yet generally they are making good profits. In some cases profits are as high as Rs. 74,000/- in mofussil mills and Rs. 4 lakhs to Rs. 10 lakhs annually in the case of mills in Bombay City. (Para. 11.)

Profits registered by ghanis are low ranging from Rs. 200/- to Rs. 1,000/- per year. Some Telis have alternative sources of income, *e.g.*, agriculture, Kirana, grocery or tobacco business, plying of carts for hire, etc. The gross income from these sources varies from Rs. 500/- to Rs. 1,000/- a year. (Para. 14.)

Mills in the mofussil in talukas and districts compete with ghanis. Mills in Bombay city do not find it an economic proposition to sell their oil in districts owing to cost of transport Mills in districts compete not only with ghanis but also with mills in Bombay city. This is due to their lower overhead costs, better access to raw materials in the hinterland, saving cost on transport, lower wages of labour—skilled and unskilled, better contacts with producers of raw materials and consumers of oil and equally productive efficiency as Bombay city mills. They send their oils to Bombay city in tank wagons which are sold at about 5 annas per quarter cheaper than oils produced by mills in Bombay city. The latter sell oil at higher rates to wholesalers in seven to eight barrels and can afford to charge a higher price where the wholesaler has no purchasing capacity to purchase huge quantities of the oil in tank wagons in bulk. (Para. 11.)

Mills do not crush safflower or kardi seeds. This is a monopoly of ghanis especially in the Karnatak. All the same the mill-manufactured groundnut oil which is cheaper in price by 2 to 3 annas per seer competes with kardi oil. Only those who have a decided preference for ghani kardi oil buy it instead of cheaper groundnut oil. (Para. 13.)

The handicaps which have hamstrung the progress of oil ghanis are:—

(1) *Lack of adequate finance and under-capitalisation.*—All their natural advantages such as their location in zones of production of raw materials, very low overhead costs, little cost of transport, better nexus with producers of oil seeds and consumers have been neutralised by the gravitational pull of high finance represented by mofussil and Bombay city mills. Producers of oil seeds sell the raw materials to district or taluka merchants, who in turn despatch them to guaranteed brokers and muccadams of mills. Producers get low prices owing to their lack of bargaining power, inflated deductions for refraction, quality, size of nuts, etc. Telis do not stock oil seeds in considerable quantities unlike mills who are on the look-out for market intelligence and seasonal crop forecasts and buy their seeds at the cheapest rate possible and guarantee stocks by placing contracts with their guaranteed brokers and muccadams for cash delivery of limited quantities for about a month or so and the remaining on future delivery contract at settled prices. Many Telis, on the other hand, are in economic bondage to merchants due to the deadweight of their personal or ancestral debt. They get seeds at high prices in very limited quantities, the quality also not being very good as what they buy is mainly what is left over after the preferential sale to mills and speculators and for the terminal markets in Bombay is effected by merchants. (Para. 14.)

(2) *Antiquated methods of production.*—The country ghani works for eight hours a day at the most for 120 to 180 days per year crushing at the most 96 lbs. of seeds per day with an oil extraction index of 33 1/3 to 38 per cent. Even the Haskell ghani

with superstructure, which is supposed to be the best equipment, crushes only 180 lbs. of oil seeds per day taking 10 charges of 15 minutes each and its oil extraction index is 40 per cent. As against this, a rotary crushes half a ton of seeds with an extraction index of 38 to 39 per cent. and an expeller crushes 51/2 to 61/4 tons per day of 24 hours in three shifts of eight hours each and its extraction index is 42 per cent. to 44 per cent. Though in the mofussil owing to occasional shortage of raw materials due to dislocation of transport, breakdown in the supply of power from diesel oil or steam engines, some mills work only for eight hours a day, there are others which work for 24 hours. In Bombay city mills work invariably for 24 hours though in some cases the total crushing capacity is not fully utilised (Para. 14.)

(3) *Undependable and weak motive power.*—Whereas mills use electricity, power from diesel oil or steam engines, ghanis use bullocks. Bullocks now-a-days are ill-nourished, emaciated and their physical endurance and power are limited. They are also liable to periodical inactivity owing to disease, like rinderpest, foot and mouth diseases, etc. (Para. 14.)

(4) *Lack of organised marketing.*—Mills have a well designed network of business organisation for the sale of their products. There are only 20 co-operative societies of Telis which have been organised so far. Mostly Telis work on piece-work system crushing little rations of oil seeds brought by producers and consumers for getting oil and oil cake. Even here rotaries are competing with ghanis charging much less for crushing in comparatively one-fourth of the time that a ghani takes to crush an identical quantity. In the case of the ghani the customer has to give 1 lb. of oil cake as feed to the bullocks which is not deducted by rotaries. Where oil is produced by Telis commercially for sale investing funds in working capital it is sold rarely on the premises but mainly to merchants who give them lower prices inflating defective percentages of refraction, free fatty acids, iodine and saponification values, mucilage, darker colour, etc. (Para. 14.)

(5) *No independent price fixation.*—In some cases consumers prefer ghani oil to mill oil. In others, owing to lower purchasing power, the cheaper mill oil is preferred to the costlier ghani oil. Normally, the Telis' prices are in alignment with mill prices. (Para. 14.)

Recently to decrease the cost of production and derive higher profits both millers and telis adulterate edible oils with cheaper mineral oils like white or spindle oil. The percentage of admixture is sometimes as high as 21 per cent. by the time the oils reach the ultimate consumers. (Para. 14.)

Telis admix costlier oils like sesamum and safflower with cheaper oils like groundnut. They also sometimes become purveyors of oils of their rivals, *viz.*, mills by selling mill oil to their consumers as ghani oil. This fraud must be sternly put down by the State by taking deterrent and punitive action against the offending mills, telis, wholesalers and retailers of mill and ghani oil. Those Telis who are guilty of these malpractices should be given no help by Government. The proper place for those who practice such fraud is the jail rather than respectable society. (Para. 14.)

Along with oil a twin product, oil cake, is manufactured in one process of crushing oil seeds. From 1943 to Febuary 1949, when the produce of oil cakes of mills was frozen by Government and its price was controlled at Rs. 130/- per ton, Telis enjoyed unearned and windfall benefits. This advantage has now stopped owing to decontrol of mill oil cake prices and its free mobility. At present conditions in the oil cake market are in a fluid state. In a state of equilibrium the margin between mill oil cake and ghani oil cake prices is Rs. 5/- to Rs. 10/- per ton to the advantage of the ghani. Ghani oil cake, because of its higher oil content, *viz.*, 13 to 14 per cent. of the weight of the cake, is more palatable as cattle feed than mill oil cake. Conversely, owing to the low oil content of the mill oil cake, *viz.*, 8 to 9 per cent. of the weight of the cake, mill oil cake is preferred as fertiliser. (Para. 14.)

(6) The cost of crushing per pound of oil, apart from realisation from the sale of oil cake, varies from 15 to 22 pies in ghanis. Similar figures in respect of an expeller are 4.1 to 8.5 pies and the average cost of such crushing in a rotary is 5.8 pies. (Para. 14.)

(7) *Absence of subsidiary industries.*—Whereas mills have many other side lines like hydrogenation of oil and manufacture of vegetable ghee, vegetable tallow, candles, soap, lubricants, hair oils, glycerine, paints and varnishes, speculative business in oil seeds and commission on their export and import, Telis produce only oil and oil cake. (Para. 14.)

Though taxation, local, municipal and central, takes a big slice of the gross income of mill oil business, yet the net income or residue left after payment of taxes is still fairly high. As against this, Telis do not pay taxes and though some of them may have other sources of income, as pointed out above, the total volume of their net income per year is a minute fraction of that of mills. (Para. 15.)

Chapter III.

The Haskell ghani was invented in 1940 and provision for superstructure and arrangements to enable it to be driven by electricity were made in 1946. This is an improvement on the country Kulu or stone mortar ghani with a higher daily intake and a higher extraction of oil. The total cost is Rs. 390/- out of which Rs. 195/- is given by Government as subsidy to hereditary Telis and the remaining Rs. 195/- as a loan free of interest and returnable in monthly instalments of Rs. 5/- each. The Haskell ghanis are installed by the Government mistries in mortars owned by hereditary Telis and Government gives them technical help for repairs when necessary. So far 67 Haskell ghanis have been installed. (Para. 19.)

Training classes of one month's duration are conducted at the Village Industries Experimental Workshop. The Teli trainees get stipends of Rs. 25/- per month and travelling allowance. Lodging arrangements for trainees have been made in the dormitory of the Workshop. The staff consists of one Assistant Engineer, three Ghani Mechanics, one Oilman and one Attendant. One hundred and twenty-five Telis have been trained so far. There is a scheme for manufacturing 1,000 more Haskell ghanis. The possible rate of production at the workshop is 100 ghanis per month, but as 67 ghanis have been distributed in the course of nine years so far it is obvious that the production has been very languid. (Para. 19.)

Individual Telis are given loans for working capital to the extent of Rs. 500/- repayable in five years in equated monthly instalments, the first instalment to start one year from the date of disbursement of the loan. (Para. 19.)

The Joint Registrar of Industrial Co-operatives and Village Industries has been authorised by Government to sanction loans upto Rs. 5,000/- for working capital and Rs. 5,000/- for tools and equipment to each co-operative society of Telis. Of the latter, 50 per cent is given as subsidy to the Society and the remaining 50 per cent is treated as a loan carrying interest at 4 per cent per annum repayable in five years in equal six monthly instalments. A co-operative Society of Telis is also eligible for a subsidy of Rs. 600/- to meet its management expenses. (Para. 19.)

Government has directed the Forest Department to lay down a condition while auctioning forest coupes that logs suitable for ghani mortars should be preserved by contractors. A suitable reinforced concrete mortar has been designed at the Experimental Workshop and is under trial. It is expected to reduce the cost of the Haskell Ghani from Rs. 390/- to Rs. 250/- (Para. 20.)

So far 20 Societies of Telis have been organised and registered. Out of these, four Societies at Pandharpur, Khed, Charegaon and Chandwad have been given special assistance. (Para. 21.)

In Dharwar District a grant-in-aid of Rs. 2,600/- is sanctioned to the Village Industries Committee for starting an Oil Centre. (Para. 22.)

Government has approved a scheme for starting 10 co-operative societies in the West Khandesh District for the development of the village oil industry on a self-sufficient basis by introducing 10 Haskell Ghanis. In course of time Government expects to introduce 100 Haskell Ghanis in that District. (Para. 22.)

A scheme for 500 centres to be organised in five years, each centre having two ghanis and aided with a subsidy of half anna per pound of oil and another for purchasing tools and equipment has been submitted by the Village Industries Committee to Government. (para 22.)

Government has decided not to encourage new oil mills and to refuse any facility by way of land, import of machinery, issue of capital, etc., required by them. (Para. 23.)

Government is also considering a system of licensing of oil mills employing rotaries and expellers. (Para. 23.)

The assistance sketched above is inadequate. It should have been fixed in terms of ghanis instead of in terms of units of Societies, because whereas some Societies cover only a few ghanis. others cover more. The Society in Pandharpur covers as many as 105 ghanis. The subsidies have not created sufficient productive effort and the loans have not engendered adequate repaying capacity nor adequate profits for the business. The guarantee system has in effect been a dead letter as district co-operative central financing agencies have not advanced adequate cash credits to Teli Co-operative Societies for purchase of oil seeds in spite of the Government guarantee of 25 per cent against possible losses to such banking institutions in case of fluctuation in prices of oil seeds to a level lower than the rate at which they are purchased. Besides the guarantee system is indefensible in principle. (Paras. 24 to 30.)

Instead of fragmentary schemes of different kinds it is better to go to the very root of the problem and eradicate all handicaps. (Para. 30.)

There is in effect no ban on starting of new mills Government has only discouraged them by refusing to allow certain facilities. It is likely that in spite of the discouragement, in the absence of a clear ban new oil mills might be set up. In view of the fact that there is no full utilisation of the crushing capacity of oil seeds in the existing mills occasionally, perhaps it is arguable that new ventures in this direction are not necessary. Even if new ventures start in spite of discouragement by Government it is doubtful whether they will find markets for their edible oils in rural areas as the offtake in such areas depends on two factors viz. (1) what is the customary ration they are used to and (2) whether they have adequate purchasing power to consume more oil. It is likely, therefore, that if these ventures manufacture oil it will either be sold in the urban areas or exported to earn foreign exchange—especially hard currency. The latter is more likely because of the removal of the export duty on oils. Under the Bombay Growth of Food Crops Act oil seeds are not classified as either scheduled food crops or scheduled non-food crops. The minimum proportion of a cultivator's holding which must be sown with food grains is two-thirds. Logically it is open to sow the remaining one-third with oil seeds though in practice the remaining one-third is utilised not only for oil seeds but for other commercial non-food crops like cotton and tobacco. There has been an increase in the acreage and production of some oil seeds especially groundnut and sesamum. It is doubtful how much of the extra production is being crushed for the production of oils and how much is exported to earn foreign exchan on With the removal of the export duty on oil seeds the land will be more facilitated. Under the licensing system proposed in detail in Chapter IV the effort in new oil mills, if any, should be devoted as far as possible to production of vegetable ghee, soaps, lubricants paints and varnishes candles, glycerine, etc., for which there is still unsatisfied demand in the market. (Para. 31.)

The use made by the Indian Oil Seeds Committee of its funds from the Government of India's Cess on mill oil and export duty on oil and oil seed is summarised in para. 33.

The key-note of all assistance given should be that it is pitched at that level at which it becomes effective. Preliminary scrutiny to assess the *bona fides* of a particular industry and claim to assistance in the national interest is necessary. Government should also find out what assistance such deserving industry can get from other sources, for instance, its owned funds, co-operative central fiancing agencies or other banking institutions. Only the deficit need be made good by Government. But having satisfied itself that a particular industry deserves help and having assessed the extent of that help which is necessary from Government, Government should then go the whole hog and assist the industry adequately. Inadequate assistance means waste of funds which neither profits the industry to which it is given nor the public exchequer nor the nation at large. If Government's funds are limited as far as development of a particular industry is concerned it is best to assist only a few units from the industry but to assist them in such a way as to put them in a stable equilibrium rather than attempt to cover all the units with fragmentary and infructuous assistance. (Para 35).

CHAPTER IV.

It is impossible and undesirable for Government to undertake monopolistic purchase of oil seeds and their storage for making them available to Telis with an indirect subsidy bearing the cost of transport, overhead charges, etc. It would mean an outlay of Rs. 16,87,50,000 for 10,000 ghanis and the subsidy would amount even at 10 per cent. to Rs. 1,68,75,000. Apart from this, there will be the question of construction or acquisition of godowns, safe preservation of property and speculative risks owing to fluctuation in prices to a level lower than the price at which the seeds are purchased by Government. (Para 37).

There should be no ban on the export of oil seeds from Bombay Province. Such a ban would only depress the prices and adversely affect the rural producer without corresponding benefits. Leakage and illicit exports are bound to take place in spite of vigilance. In the interests of the nation it is better to have free mobility and free trade of commodities between Provincial areas rather than water-tight compartments. Unilateral action by one Province against the interests of another is not desirable. (Para 38.)

It is impossible for a Provincial Government unilaterally to stabilise the prices of oil seeds without first controlling the supply and insulating the Provncial area from imports from other Provinces. As the latter is not advisable the former is not practicable. (Para. 39.

The volume of speculative trading in oil seeds is 8 to 10 times that of trading for genuine requirements. Regulation of speculation and trading in future is desirable and should be taken in hand without delay by the Provincial Government and the Government of India. (Para 38).

Establishment of licensed warehouses will go a long way in regulating the flow of oil seeds in the market and ironing out the great gaps between the harvest dip and the acute shortage and high prices of oil seeds in the off-seasoon. (Para 38).

The present system under which Government has guaranteed banking institutions who advance cash credits to four co-operative societies in the Province for purchase of oil seeds against possible losses to the extent of 25% should be discontinued. In principle it is not appropriate to commit the public exchequer to unascertained risks. Needless to say, this guarantee system should not be extended to other co-operative societies. (Para 40).

It will not be practicable to demarcate spheres of production between ghanis and mills. It will be disastrous to the consumers to ban manufacture of edible oil by mills, as even assuming that all the 10,000 ghanis in the Province are Haskell Ghanis with superstructure (so far only 67 Haskell Ghanis have been distributed), at the present rate of consumption of edible oil 24,198 such ghanis would be required. As the rate of production and distribution of Haskell Ghanis is very slow it will be a Herculean task to produce and distribute 24,131 more Haskell Ghanis. Apart from this, if the entire Province is to be covered by ghanis a very high-pitched organisational ability will be required to meet the demand of rural areas and especially of urban areas situated at great distances from the centres of production. (Paras 41 and 42.)

Raw materials of the village oil industry and its finished products should be exempted from the levy of Octroi and terminal taxes by local bodies. Certificates for the benefit of Nakawallas testifying that particular goods are raw materials and finished goods of the village oil industry should be given by Mamlatdars of the Talukas concerned. (Para 43).

The margin between the cost of crushing per pound of unadulterated oil in a ghani on the one hand and in expellers and rotaries on the other hand is 11.98 to 12.7 pies, taking into account realisation from oil cake. Wholesale and retail distributors' margins and the cost of transport would be 3 pies per pound of oil in the case of Bombay mills and 1.8 pies in the case of district mills. (Paras 45 and 46).

Rationalisation in production in ghanis by using electric power or cheaper motive power and mobilisation of as much self-help as possible and economies are necessary. Some working costs like repairs, depreciation, maintenance charges of bullocks, are irreducible. A little saving on interest on borrowed fixed capital or working capital will be possible if loans are advanced either free of interest or at low rates of interest by Government. (Para 44).

To equalise advantages for mills and ghanis, a margin of 2 annas per seer of oil has to be made up. (Para 47). This should be done in the following manner:—

The public exchequer is already over-burdened with commitments of expenditure on post-war reconstruction and Government's revenue are more or less inelastic. To assist the ghani industry, therefore, additional sources have to be explored to obtain the requisite funds. (Para 71).

A Cess of 1/4 anna per seer or Rs. 17/8/- per ton of oil seeds and copra crushed in mills should be levied by Government which will bring a revenue of Rs. 93,37,195/- per year on the assumption that all the 10,000 ghanis will be covered by Co-operative Societies in one year. If this is not possible, a proportionately lower annual cess may be levied with due regard to the funds required for working our Scheme. A five year scheme is given in Appendix I. The Cess should not be a permanent mechanism. It should be discontinued after the ghani industry is put on a stable and profitable working basis and when it has built up sufficient reserve funds after repayment of loans advanced by Government. Government should take a quinquennial overall review of the position. (Para 48 and Apprendix I).

Government of India should allot to the Government of Bombay the income derived from its cess on oil produced in mills in Bombay Province for expenditure by the latter Government. This should be approximately Rs. 14,593/- (Para 48).

All ghanis and mills using expellers and rotaries should be registered and licensed. The licence fee should be Rs. 5/- per one horse power or kilowatt per expeller per year, Rs. 3 per one horse power per rotary per year and Rs. 5/- per ghani per year. The total licensing revenues thus will be Rs. 1,17,970/- per year. (Para 49).

Where District Municipalities have levied a licence fee of Rs. 50/- per year per ghani they should be asked to reduce it considerably, as this fee is pitched at a high rate when the average profits of a ghani per year are about Rs. 300/- to Rs. 500/-. (Para 49).

The licensing system should not be irksome. Its object should be merely to obtain periodical returns of stocks and production, technological and scientific advance made, rationalisation, extraction percentage of oil, production of other industrial products. It should not amount to any unreasonable nagging from Government or undue encroachment on the autonomy of the industry. Such a system will keep Government, the public and research workers *au fait* with a periodical census of industrial statistics. (Para 49).

It is unlikely that the Cess will be shifted by mills to consumers by increasing oil prices. As mills manufacture many other articles like vegetable ghee, soap, oil cake, hair oils, lubricants, candles, paints and varnishes, glycerine, etc., the Cess is likely to be dispersed by them in all these commodities in minute fractions. Even if the entire Cess is shifted to oils the prices of mill oil will at the most increase by 7 pies per seer assuming that the cost of production otherwise remains the same as at present. Consumers of mill oil cake being comparatively rich, sugar cane, paddy growers, etc., utilising irrigation, they can afford to pay higher prices, if any. (Para. 50).

The scheme of the Cess and what follows will not liquidate oil mills. Even 10,000 Haskell ghanis can satisfy in the maximum the requirements of only 1,08,00,000 adults as against a rural population of roughly 1,44,18,281 adults in the Province. The deficit of the demand in rural areas could still be met by mills. The urban market will also be open to them. There is immense scope for increased consumption of mill oil cake for manure and for the production and consumption of vegetable ghee, lubricants, hair oils, soap, candles, glycerine, etc. where mills will continue to play an increasingly large part. Large scale and small industries are the systole and diastole of the giant heart of the nation which has to pump industrial pressure at full speed to step up production and to increase the per capita national income both in terms of money and in terms of real wealth, and both these types of industrial production are required. (Para. 52).

Ghani oil should be exempted from the payment of the Bombay Sales Tax. At retail rate of Rs. 1/8/- per seer of groundnut oil the sales tax at half an anna per rupee would be 9 pies per seer of mill oil. (Para. 53).

Five hundred to six hundred co-operative societies each consisting of roughly 20 ghanis and including all the Telis operating these ghanis and at least 50 per cent. of the producers of oil seeds and 50 per cent. of consumers of oil and oil cake in the society's jurisdiction should be organised as quickly as possible. The present rate of formation of societies is too slow. So far only 20 Societies have been formed. Societies consisting merely of Telis and "Sympathiser members" are of no avail. They do not reduce the cost of production nor solve all the essential problems of the Telis given in Chapter II. There must be a close fraternal and democratic association between Telis, producers of oil seeds and consumers. This is the *sine qua non* of any effective scheme in the interests of the rural community. Formation of societies of Telis only is no solution and any help that may be given to such societies is a waste of public funds. The jurisdiction of each co-operative society should be fixed with reference to geographical contiguity, homogeneity and compactness to facilitate active participation by all members in the demoratic conduct of its management. (Para. 54).

Each Society must take immediate measure after formation to convert its ghanis into Haskell Ghanis. Government should continue the present arrangements for the free servicing of Haskell ghanis. (Paa 54.)

It should calculate the requirements of oil and oil cake of the entire community in its jurisdiction and plan a production programme accordingly. Oil seeds necessary for the production of this quantity of oil and oil cake should be reserved by the producer members for the Society and stocked in the Society's godowns or in their own houses. These godowns should be recognised and run by Government through its own staff as Government licenced warehouses. Where regulated markets for oilseeds are established by Government, producer members of the Societies should not be compelled to sell their seeds to the Societies in "market yards" only as their interests are sufficiently protected by the Societies (Para 57). Stocks of seeds of the members in excess of the Society's requirements should be made available preferentially to those Societies which are situated in areas which are deficit in the production of oil seeds and after this is done the surplus should be sold in the open market to fetch the most remunerative prices either in the district or in terminal markets. Each co-operative society should be linked up with the district sale and purchase union and the Provincial Co-operative Marketing Society and the District Industrial Association. This will enable it to pool market intelligence and to know what is the best price it can get for oil seeds and for the surplus finished products, oil and oil cakes, that it will manufacture. (Paras 54 and 62).

The Society must have an open door policy and the aim should be that though 50 per cent. of the producers and consumers has been set down as the minimum it does not become in effect a maximum and that the Society should cover the remaining 50 per cent. as early as possible. (Para 54).

Government assistance to each society should be as follows:—

(1) A grant of Rs. 600 to each Society for management expenses until the Society shows enough profit or reserve fund. For 500 Societies this means a grant of Rs. 3 lakhs. (Para. 54).

(2) A loan up to a maximum of Rs. 600/- per ghani for converting it into a Haskell Ghani, for buying better equipment, for more efficient bullocks and other apparatus of production should be given free of interest and returnable in 10 years in equated monthly instalments, the first instalment commencing from the month subsequent to that in which the equipment is supplied. This means maximum loans of Rs. 60 lakhs for 10,000 ghanis. (Para 55).

(3) A loan of Rs. 1,000/- per ghani to each Society for a godown or a warehouse for the safe storage of seeds and finshed products returnable in 10 years in equated annual instalments on the same lines as above. The loans should be free of interest in the first two years and thereafter interest at 2 per cent. per annum may be charged. The sum involved will be Rs. 1,00,00,000 for 10,000 ghanis. (Para. 56). Alternatively, Government should itself build such godowns and run them as its licensed warehouses.

(4) A loan of Rs. 3,500/- per ghani free of interest for purchase of oil seeds returnable in 12 equated monthly instalments, the first instalment starting the month next after it is given. This means Rs. 3 1/2 crores for 10,000 ghanis per year. (Para. 57).

(5) A loan of Rs. 10,000 for one motor van or lorry to a group of 10 co-operative societies to facilitate transport. This would mean Rs. 5 lakhs. (Para. 58).

The total loans would thus be in the maximum of Rs. 5,15,00,000/- though in practice all this sum would not be necessary and will depend on the number of societies formed, what eqpipment has to be replaced, etc. In practice the total loans required would perhaps be about Rs. 2 crores to Rs. 3 crores at the most. Even if all this amount of Rs. 5,15,00,000/- is required and is given free of interest it means sacrifice of interest of Rs. 15,45,000/-. (Para 59).

(6) A bonus of one anna per seer of oil produced by each Society subject to the condition that the Society concerned gives (1) a written undertaking that it will convert all its ghanis into Haskell Ghanis within the course of eight months at the latest from the date of formation of the Society. (2) that the extraction of the oil is not less than 38 per cent. in respect of any ghani and is carried on hygenically, (3) that all ghanis of the Society are worked for 300 days in a year of eight hours each and (4) that the oil produced is of good agmarkable quality and not adulterated with cheaper oils or with white or spindle oil. Government may annex any other reasonable condition it thinks fit. The bonus should be disbursed at the end of the year after careful reference to the daily registers showing the working of the ghanis. The bonus would cost Rs. 67,50,000/- for 10,000 ghanis assuming maximum production and that all ghanis are Haskell Ghanis. (Paras. 59 and 60).

The total cost to Government would be Rs. 3 lakhs on grants for management expenses plus Rs. 67,50,000/- for the bonus plus Rs. 15,45,000/- for sacrifice of interest i.e. Rs. 85,95,000/-. As against this, the revenue from additional sources mentioned above will be Rs. 94,69,758. Therefore, all this assistance will not be a burden on the public exchequer. (Para. 59).

As far as loans are concerned, recourse could be had to the market where there is a plethora of loanable funds and this will only mop up surplus purchasing power and expedite the solution of the problem of inflation. The loans should be secured by creating a floating charge or a mortgage on all the assets of the Society, moveable and immovable, and also on a part of the lands of the members of the Society if that becomes necessary. Government should advance only that portion of the loans which cannot be advanced by co-operative and district central financing agencies at very low rates of interest. (Para 64.)

Out of the margin of 2 annas per seer of oil between ghani and mill cost of crushing of seeds, 21 pies will be made up by the bonus to Societies and the Sales Tax on mill oil. The remaining will be made up by the cess or by the indirect advantages from the interest free loans, etc. The assistance has been so pitched as not to develop a demoralising complaisance in the Societies. It leaves sufficient scope for productive effort. (Para. 61.)

Oil and oil cake produced by the Society should be sold at reasonably low rates to the community in its jurisdiction. The surplus should be made available to those co-operative societies whose production due to local shortage of raw materials is low. If any surplus still remains it should be sold in the urban areas at fully remunerative prices including cost of transport. (Para. 66).

Till sufficient reserve funds are built up dividends should be limited to 3 1/2 per cent. per annum. (Para. 65).

As these co-operative societies will safeguard the interest of their oil-seed producer members, it should not be necessary where Government has established regulated markets for oil seeds under the Bombay Agricultural Produce Markets Act to compel the producers to sell their oil seeds to the Societies in statutorily fixed "market yards". This will save them unnecessary transport over long distances to central market yards for effecting sales. (Para. 67).

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Where there is a possibility for manufacture of non-edible oils from seeds like mowrah, linseed, rapeseed, etc., the Society's ghanis may undertake this. If there is time, soap can also be manufactured, the scheme for which is given in Appendix 'G'. Other inexpensive side lines not involving difficult scientific processes outside the reach of the competence of the rural community like manufacture of toys and boards from the shells of oil seeds after decortication may also be taken up by these societies. (Para. 68).

The advantages of the scheme are summarised in para. 71.

Every year the Department of Cottage Industries should submit a detailed report to Government giving facts and figures of profits and reserve funds built up by the village oil inlustry mentioning also whether the assistance given by Government has been utilised *bona fide* or has been misapplied. It will enable Government to decide whether the industry is in such a position as to stand on its own legs and whether the protection should be continued or whether it should be withdrawn. (Para. 61).

An alternative solution of the problem of the rural community not only of Telis but also of the agricultural producers and consumers of oil and oil cake would be the establishment of broad-based democratic rural corporations utilising two expellers each in each dstrict of the Province. Shares of the denominations of 8 annas should be floated so that even the poorest member of the rural community could become a shareholder of the corporation. One corporation employing two expellers will satisfy the requirements of 1,52,232 adults, i.e. roughly 50,000 families of three adult each on the average. If each family contributes Rs. 2 for the shares, a fixed capital of Rs. 1 lakh for 2 expellers including cost of machinery, motor, elevator, filter, buildings, installation charges, boilers, etc., can be covered by the villagers themselves without Government help. Even if Government help becomes necessary the deficit to be made good would be very small consisting of a few thousand rupees. (Paras. 72 and 73).

There should be no maximum limit for the holding of shares by any individual as the system will not be one share one vote but one man one vote. All members will have an equal right and opportunity of contributing to the deliberations of the corporation. The advantage of obtaining raw materials from the members themselves will be open to this corporation as much as to the co-operative societies above. The godowns of the corporation should be treated as licensed warehouses. The Telis should be given a very decent and remunerative pay and maintained in a very good state of economic comfort. (Paras. 74 to 77).

Members will get oil and oil cakes at cheap rates with due interest of the corporation at heart. Surplus production should be sold at fully remunerative prices. (Para. 74).

Government should give a loan of Rs. 2 lakhs for working capital to each corporation free of interest in the first year and carrying interest at 4 per cent. from the second year until full repayment. The loan should be returnable within a period of three years in equated monthly instalments, the first instalment starting in the month following that in which the loan is advanced. It should also give a loan to each corporation of Rs. 20,000 to Rs. 30,000 for purchase of 2 or 3 motor lorries to facilitate transport. The loans should be secured adequately on all the moveable and immoveable assets of the corporation. (Para. 76).

The corporation should also take up manufacture of commodities like soap, paints, varnishes, hair oils, etc., when it develops sufficient stability. (Para. 76).

Government has itself announced that it will subsidise rural industries for the purchase of suitable equipment required for the introduction of mechanisation. This project of corporations should be tried by Government in some districts concurrently with the scheme of co-operative societies given above. The areas of operation of the two should, of course, not overlap. (Paras, 72, 78 and 80.)

Rationalisation and mass production at cheap unit cost is the key-note of modern industrial enterprise and the project of such corporation should not be ruled out merely on the ground that machinery is bad. (Para. 77).

The corporation will have no vices and malpractices of factory enterprise but all its good points as far as productive efficiency at cheap unit cost is concerned. It will not be a dividend-hunting plutocratic enterprise but a broad-based rural democratic corporation in which not only the rich but also all the poor members of the village community coming in its jurisdiction will benefit. (Para 77.)

Such a corporation will not require adventitious aids from Government like the co-operative societies. There is no need if such corporations are established to levy a Cess on oil seeds crushed in mills nor of a subsidy for the production of oil. (Para. 76.)

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Technical skill for running expellers and for business management can be instilled in villagers by training which should be given either in mills on apprenticeship basis or by engineers of whom there is no dearth in the Department of Industries of the Provincial Government. (Para. 75).

The most effective method of fighting competition from mills is, as Shakespeare said "having the enginer hoist with his own petar." (Para. 77).

The scheme for co-operative societies and the scheme for setting up of rural expeller corporations are in conformity with and within the framework of the declared policy of the Government of Bombay, the Government of India and the National Planning Committee. In order to get a comparative idea as to which of the two schemes is more suitable to be introduced on a large scale Government should try both these schemes simultaneously taking care to see that the areas of operation of the two schemes do not overlap. As regards the first scheme it will be seen from the above analysis that it does not involve a financial burden on Government. It may mean recourse to the market of loanable funds to the extent of Rs. 2 crores to Rs. 3 crores at the most. Such loans will mop up surplus purchasing power and reduce inflation. If Government does not wish to float the entire extent of these loans the scheme may be tried not to cover all the 10,000 ghanis but at least half the number or whatever number Government decides that it is in a position to cover, but the guiding principle should be that the scheme should be tried in its entirety not reducing the assistance in terms of ghanis which has been indicated lest it should again relapse into fragmentary and infructuous assistance. The loans indicated in terms of each ghani are the minimum and if the amounts are cut down they will not develop in the recipients sufficient repaying capacity, the loans will not be of a self-liquidating character and Government may have to take recourse to coercive recovery by sales in distraint, forfeiture, etc. This can all be avoided by pitching the assistance at an adequate level as mentioned in our scheme. The scheme for rural expeller corporations involves very little cost to Government. It should also be tried in a few districts locating them at suitable places.

The scheme if adopted by Government and pursued conscientiously by its officers and explained carefully to villagers will ameliorate the present depressed conditions of the rural community. This has been the declared goal of Government. (Para 81).

L. M. NADKARNI,
Chairman.

§LAXMIDAS PURSHOTTAM ASHAR,
Member.

R. G. KAKADE,
Member.

Y. G. DHARMADHIKARI,
Secretary.

8th April, 1949.

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§ Mr. Ashar subscribes to all the recommendations of the Committee excepting those relating to the establishment of rural expeller corporations.

LIST OF APPENDICES

A—Questionnaire issued to Mamlatdars in the Province (with statistical statements A and B), some prominent economists, the Joint Registrar for Industrial Co-operatives and Village Industries, Bombay Province, Poona, and a note by Principal D. G. Karve, on the Ghani Oil-crushing Industry.

B—Abstract of crushing charges for one pound of oilseeds in some of the mills in Bombay City and the mofussil as also at some oil centres using bullock-driven ghanis (with detailed statements).

C—Statement showing the capital and working expenditure with annual profit and loss of some representative oilmen (telis) in the three Divisions of the Province.

D—Statement showing the area and outturn of groundnut for the years 1939-40, 1943-44 and 1947-48.

E—Statement showing the railway freight rates for oil-seeds, edible oils and oilcake.

F—Statement showing imports and exports of oil-seeds, vegetable oils and oilcake in the Province of Bombay.

G—A scheme for conducting a soap manufacturing centre on a small scale (medium size unit) prepared by the Chemist in charge of the Village Industries Research Laboratory

H—A note on the Technique of Oil Production.

I—A table of a five year programme to cover 10,000 ghanis showing funds required and the rate of the Cess on oilseeds and copra crushed in mills.

APPENDIX A

No. QES/SS of 1948.

OFFICE OF THE GHANI OIL-CRUSHING INDUSTRY COMMITTEE, c/o Office of the Private Secretary to the Governor of Bombay, Govt. House, Bombay 6, December 20, 1948.

From

L. M. Nadkarni, Esquire, ICS,
Private Secretary to the Governor of Bombay, and Chairman of the Ghani Oil-crushing Industry Committee.

To

All Mamlatdars/Mahalkaris in the Province.

Subject :—Questionnaire for the—Ghani Oil-crushing Industry.

Sir,

The Government of Bombay has recently constituted a Committee to review the position of the ghani oil-crushing industry and to make suitable recommendations for its proper development. With a view to ascertaining the exact position of the ghani oil-crushing industry *vis-a-vis* the mill oil industry, the Committee has drawn up a questionnaire and a statement for collecting the necessary statistical data.

2. Will you please obtain and tabulate the necessary information in the statistical statement and give replies to other questions of the questionnaire after obtaining the same from the oilmen and oil mills in your taluka?

3. Please go through the questions very carefully and also study the instructions appended to the questionnaire and try to obtain as reliable and accurate information on all points as may be possible as the value of the recommendations of the Committee to Government depends entirely on a correct appreciation of statistical data.

4. Similar information should also please be obtained from oil mills working in your taluka and the necessary statements along with the replies to the questions should please be forwarded to the Secretary of the Committee at the address given above *within one month* from the date of receipt of this letter.

5. As the Committee is expected to complete its work within a short period, please make sure that the replies are sent to the Secretary of the Committee within the time-limit of one month.

Yours faithfully,
Sd. L. M. NADKARNI,
Chairman.

Instructions to Mamlatdars & Mahalkaris for answering the Questionnaire and Consolidating the Material for the two Statements.

The following points should be carefully noted by Mamlatdars/Mahalkaris while giving replies to the questions and compiling information for the statistical statements.—

(1) Statement "A" is meant for collecting information in respect of the working of the oil-ghanis in the taluka, whether they are worked by hereditary oilmen or by others. Statement "B" is intended to give similar information for all oil-mills working in the taluka.

(2) As regards items 8 (a), (b), (c), 9 and 10 of statistical statement A, please mention the number of telis for which you have collected the information. In any case please give information regarding these items as accurately as possible in respect of five representative telis whose individual figures should also be supplied along with their names and addresses. This should be done in the form of an appendix. Information in regard to other sub-items of item 8 should be of a general nature and could be given by you after examining some of the oil-producers.

(3) Information in statistical statement "B" should be given for each oil-mill individually and the cost of production figures should ordinarily be taken from the last audited Balance Sheet of the mill. You may also obtain from each mill a copy of the last balance sheet, trading or manufacturing account and profit and loss account for the last year and send the same along with other information.

(4) General replies to all questions of the questionnaire could be furnished by you after obtaining the necessary information in respect of the working of all oil-ghanis. Your close contact with oil-men's community and others engaged in the business of working country ghanis and their general economic conditions would enable you to give replies to these questions. Before answering the queries of the questionnaire, you may, if you like, consult leading local persons who are interested in the problem and will give you the benefit of their opinion.

(5) If and when necessary you may also take the help of the District Officer for Industrial Co-operatives and Village Industries, who is being separately requested to render such assistance as you may require in this regard.

(6) As the Committee has to complete its work as early as possible, will you please pay personal attention to this letter and help the Committee in its work? Please try to give the information as accurately as you can, as, it is needless to say that the conclusions of the Committee are likely to be vitiated if correct and reliable information is not furnished. The Committee hopes that you will co-operate and do your best to help it in its task.

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QUESTIONNAIRE TO MAMLATDARS/MAHALKARIS

Please give information regarding the oil crushing industry in your taluka/mahal as it is carried on by oilmen with the help of oil ghanis and by mills with the help of machinery in the appended statistical statements A and B and also furnish information in respect of the following questions of a general nature:—

1. What are the oilmen's arrangements for securing oilseeds? Have they any fixed arrangements with the growers to supply them specified stocks at definite intervals? Do they buy them through their Associations or through their co-operative societies? Have they experienced any difficulty in securing adequate stock? Have they any arrangements to safeguard themselves against fluctuations of prices of the oilseeds?

2. What are the arrangements for repairs and replacing depreciating capital? Are there local workshops for repairs? How often are repairs generally necessary? What is roughly the cost of repairs etc. every year?

3. What are the arrangements for the marketing of the oil and oil-cake produced? Are they sold through co-operative sale societies or individually by each owner separately? What are the prices at which different edible and non-edible oils are sold by ghaniwallas and by mills? Please give details of each variety. Are the prices fluctuating? Are the fluctuations restricted to specific seasons or are they unexpected? What is the extent of the market for the oil of the ghanis and for oil cake? Is it restricted to the village or villages near about the village where the ghanis are situated or is the oil sold in large number of villages in the taluka and outside? If the latter, please give an idea of the range over which the oil is sold. Are there differential transport rates for export and import of oil seeds and the export of oil and oil-cake?

Is there any competition in the market between the oil produced by ghanis and that produced by local mills or mills outside your taluka/Mahal? What is the extent of the competition from (a) local mills (b) outside mills? i. e. how much oil and oil-cake is sold by mills as compared to the oil and cake produced and sold by the ghanis. What remedies do the ghaniwallas suggest?

4. Do you think there is scope for improvement in the ghanis used at present? If so, please mention specific improvements which you may wish to suggest.

5. Do you think that there is scope for improvement in the business management of the ghani-oil industry, e.g. better organisation, reduction in the unit cost of production, use of electric power, cheaper cost of acquisition of raw material, increased productive capacity, more efficient and economic marketing arrangements, addition of side-lines like manufacture of soap, scented oil, toys, lubricants, paints, etc. If so, give your recommendations in detail taking into account the existing conditions of working of the industry and indicating by figures how the industry will be helped.

6. Do you think that with the adoption of the improvement you may wish to suggest at question 4, the ghani oil industry will be able to compete with the oil mill industry? If so, please give figures of the cost of production, the margin of profit and the retail prices at which the oils of different varieties will be sold as compared to the prices at which the oil mills produce the oils and sell them.

7. What is the total aereage in your taluka under cultivation of groundnut, seasamum niger, linseed, safflower, rape, mustard, castor, copra, khorasani, etc. and what is the total production of each variety?

8. If oil seeds are imported in your taluka/mahal, from which places are they imported and in what quantity every year. What varieties are imported? What is the railway freight per Bengali maund from various stations to the railway station in your taluka to which they are booked.

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9. What is the average consumption of oil per capita per month in your taluka/mahal?

10. Do people prefer ghani oil to mill oil? If so give reasons. Is the keeping quality of the ghani oil regarded better than that of the mill oil?

11. What is the percentage of oil extracted, the percentage of oil-cake produced and the percentage of oil left in the oil-cakes in case of (a) mill crushing, (b) ghani crushing? Give this information in respect of all oil seeds that are crushed in your taluka.

12. Are there any specific seasons during which only the oil ghanis are worked and other seasons during which they are kept idle? If so, what is the reason for the seasonal nature of the industry?

STATISTICAL STATEMENT 'A'

Regarding oilmen producing oil by oil ghani (not using electric power).

Name of taluka/mahal district

---

1. *Total number of oilmen in the Taluka.*
2. *Out of the total number of oilmen, how many are:—*

   (a) hereditary Telis

   (b) others, with their caste and other occupation.

   (c) number of co-operative societies of oilmen and the number of Teli-members.

3. *Out of the total number of oilmen. how many are:—*

   (a) solely dependent on ghani oil business

   (b) or have other sources of income [such as agricultural or any other profession (specifying the profession).]

   (c) nature of the source of income, *viz.*, agriculture or other profession, if so which?

   (d) amount of such other income per year.

4. Types of ghanis used and their no.

   (a(Local, KULU, (country type)

   (b) HASKELL

- (c) Other types, WARDHA, or any other type.
- (d) Total.

5. Kind of oil produced and number of Telis producing the same:—
   - (a) Groundnut.
   - (b) Sesamum
   - (c) Niger
   - (d) Linseed
   - (e) Rapeseed and Mustard
   - (f) Safflower
   - (g) Castor
   - (h) Cotton seed
   - (i) Copra
   - (j) Khorasani.

6. *Working of Ghanis*—
   - (a) What is the average number of hours for which a ghani is worked in a year?
   - (b) What is the average number of days on which a ghani is worked per day?
   - (c) Average quantity (in seers) of oil seeds crushed per ghani per day (give this information for seeds mentioned in item 5 (a) to 5 (j).)
   - (d) Average quantity (in seers) of oil cakes produced per ghani per day. (Give this information in respect of all varieties of all seeds mentioned in item 5 (a) to 5 (j).)
   - (e) Total quantity of oil-seeds crushed by all ghanis for average number of days in a year [give this information in respect of all seeds mentioned in item 5 (a) to 5 (p).]

(f) Total quantity of oil-cakes produced by all ghanis for average number of days in respect of all varieties of all seeds mentioned in item 5 (a) to 5 (j).)

(g) If any of the following products are produced by the Telis from oil-husks, shell, etc., give their quantity and value :—

(i) Soap

(ii) Scented oil

(iii) Toys

(iv) Glycerine

(v) Paints

(vi) Varnishes

(vii) Vegetable ghee

(viii) Lubricants.

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7. *Total number of labourers employed by Telis* :—

(a) No. of Telis employing labourers

(b) No. of labourers employed

(c) Average rate of wages paid per day.

8. *Funds used in the business* :—

(a) Capital Expenditure for the purchase of—

(i) ghanis

(ii) bullocks

(iii) other tools and equipment, if any, and working shed

(iv) Total capital expenditure.

(b) Working expenses per year:—

(i) purchase of raw materials such as oil seeds, etc.

(ii) maintenance charges of bullocks

(iii) Interest paid on borrowed capital

(iv) wages paid to labourers, if any are employed.

(v) repairs to ghanis and depreciation of fixed and wasting assets

(vi) Total working expenses.

(c) Out of capital expenditure as in (a) and working expenses as in (b), what amount represents:—

(i) owned funds of the oilmen

(ii) borrowed funds

(d) Give sources from which capital is borrowed, if possible, *viz*:—

(i) No. of oilmen who have borrowed from Saukars for their oil business.

(ii) No. of oilmen who have borrowed for their oil business from co-operative societies.

(iii) No. of oilmen who have borrowed for their oil business from the banks.

(e) Average rate of interest paid on borrowings :—

(f) What is the average cost of production per unit of one maund of oil (Bengali) for all varieties of oils produced as mentioned in item 5.

(g) What is tne sale price per unit of one maund of oil (Bengali) for all varieties of oils mentioned in item 5 (give wholesale prices also).

9. *Total sales effected during the year—*

(a) of oil—

(i) quantity

(ii) amount.

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(b) of oil cakes—

(i) quantity

(ii) amount.

(c) of other by-products—

(i) quantity

(ii) amount.

10. *Net profit or loss made in the business during the year.*

11. *Remarks :—*

STATISTICAL STATEMENT 'B

Statement regarding *oil mills using* electric power and expellers, rotary ghanis, hydraulic presses, etc.

Name of taluka/mahal district

---

1. *Full name under which the oil mill carries on business.*

2. *Town and address.*

3. *Whether owned by a single propietor or a partnership firm or a joint stock Co.*

   (a) Single proprietor

   (b) Partnership :
   Number of partners.

   (c) Joint stock company :
   Number of snareholders.

4. *Type and No. of oil pressing machinery used* :—

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   (a) Hydraulic presses

   (b) Expellers

   (c) Mechanically operated Rotary ghanis.

   (d) Others, if any

   (e) Total.

5. *Of the oil produced mention the percentage of*—

   (a) Edible oil

   (b) Non-edible oil.

6. *Labourers employed in the mill* :—

(a) Number

(b) Average wage rates per day.

7. *Working of oil crushing machines*—

(a) Average number of hours the mill works per day.

(b) Average number of days the mill works per year.

(c) What is the quantity of oil seeds (1) groundnut, (2) saf-cake produced *per day* (give this information in respect of the following kinds of oil seeds (1) groundnut, (2) safflower, (3) linseed, (4) Niger, (5) castor, (6) rape and mustard, (7) cotton seed and (8) copra).)—

(i) Quantity of oil seeds crushed.

(ii) Quantity of oil produced.

(iii) Oil cake produced.

(d) What is the quantity and value of oil seeds crushed and oil and oil cake produced per year (give this information in respect of the following kinds of oilseeds: (1) groundnut, (2) safflower, (3) linseed, (3) niger (5) castor, (6) rape and mustard, (7) cotton seed and (8) copra) :—

(i) Quantity of oil seeds crushed

(ii) Quantity of oil produced,

(iii) Oil cake produced.

(e) If any of the following products are produced, give their quantity and value per year:

(1) Soap

(2) scented oil

(3) toys

(4) glycerine

(5) paints

(6) varnishes

(7) vegetable ghee

(8) lubricants.

8. *Funds employed in the business.*

(a) Capital expenditure:—

(i) For purchase of expellers, rotary ghanis, or hydraulic presses

(ii) For purchase of other machinery, tools and equipent.

(iii) For purchase or acquisition of other fixed assets, furniture and fixtures, workshop, etc.

(iv) Total.

(b) Working expenses:—

(1) Value of raw materials purchased.

(2) Wages of labourers.

(3) Other incidental charges.

(4) Interest on borrowed capital, if any.

(5) Depreciation provided on fixed and wasting assets.

(6) Total.

(c) What amount of the funds for capital expenditure as in (a) and working expenses as in (b) represents :—

(i) The proprietor's owned fund invested (in the case of partnerships mention the partners' contribution; in the case of joint stock companies, mention the share capital).

(ii) Borrowed capital.

(iii) Average rate of interest for borrowing.

9. *Total sales effected during the year*—

(a) of oil—

(i) quantity

(ii) amount

(b) of oil cakes—

(i) quantity

(ii) amount

(e) of other by-products—

(i) quantity

(ii) amount

10. *Net profit or loss made in the business during the year.*

11. *Remarks*.

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QUESTIONNAIRE ISSUED TO SOME PROMINENT ECONOMISTS.

(1) Do you think that the ghanis that are used at present could be improved upon so as to increase their crushing capacity without much addition to their cost price? If so, please mention specific improvements you may wish to suggest and the additional cost that may be necessary for such improvements.

(2) Do you think that there is scope for improvement in the business management of the ghani-oil industry, *e.g.*, better organisation, reduction in the unit cost of production, use of electric power, cheaper cost of acquisition of raw material, increased productive capacity, more efficient and economic marketing arrangements, addition of side-lines like manufacture of soap, scented oil, paints, lubricants, varnishes, toys, etc.? If so please give your recommendations in detail taking into account the existing conditions of working of the ghani oil industry and indicating by figures how the industry will be helped.

(3) Do you think that with the adoption of the improvements that you may wish to suggest at questions (1) and (2), the ghani oil industry will be able to compete successfully with the mill oil industry? If so, please give figures of the cost of production, the margin of profit and the wholesale and retail prices at which oils of different varieties will be sold as compared to the prices at which the oil mills produce the oils and sell them.

(4) Do you think that it is possible to avoid fluctuations in prices of oil-seeds or at least to reduce the range of such fluctuations? If so, what effective steps would you suggest in the interests of ghaniwallas in this respect?

(5) With a view to encouraging the ghani oil industry do you recommend that the starting of new oil-mills should be banned? If you consider that setting up of new oil mills should be regulated if not totally banned, what manner of regulation would you propose?

(6) With a view to securing provincial self-sufficiency in the matter of oil-seeds and oil requirements of the Province, what steps, in your opinion, would be necessary so far as exports and imports of oils and oil-seeds are concerned?

(7) If you think that by regulation of the mill oil industry, scope can be found for the expansion of the ghani oil industry, what would you suggest to achieve this end? Do you think that the

ghani oil industry can entirely replace the mill oil industry without affecting the interests of the consumers of edible and non-edible oil?

(8) What measures would you suggest generally to guarantee full employment in the ghani oil industry, increase in the incomes of men engaged in it, simultaneously with the continuance of the mill oil industry, with or without regulation.

COPY OF QUESTIONNAIRE ISSUED TO THE JOINT REGISTRAR FOR INDUSTRIAL CO-OPERATIVES AND VILLAGE INDUSTRIES, BOMBAY PROVINCE, POONA 4.

(1) Please indicate briefly what assistance is being given individually to ghaniwallas under the various schemes of Government in regard to State-aid for the ghani-oil industry. Also indicate the extent of such State-aid to Co-operative societies of ghaniwallas. Do you consider that the assistance that is thus given both to the Co-operative Societies and to individual ghaniwallas is adequate? If not what further measures would you suggest to make such assistance more effective and quite adequate? How many Co-operative Societies of ghaniwallas have been organised so far? How are they functioning?

(2) What is the oil crushing capacity of (a) oil mills, (b) ghanis of different types? To what extent is this capacity actually utilised? What percentage of the mill and ghani oil produced is utilised for (a) edible purposes and (b) industrial purposes. What is the percentage of oil left in the oil cake in the case of (a) mill crushing and (b) ghani crushing? Please give the answers to these questions in respect of copra and oil seeds of each variety separately.

(3) What are the industrial uses of the oils produced? What is the annual demand for mill and ghani oils from these industries?

(4) What is the per capita consumption of oil in this Province? Is this Province self-sufficient in respect of all oil and oil cake produced in the Province? If surplus, how is this surplus utilised. If deficient, how is the deficiency met at present?

(5) Do you think that the ghanis that are used at present could be improved upon so as to increase their crushing capacity without much addition to their cost price? If so, please mention specific improvements you may wish to suggest and the additional cost that may be necessary for such improvements.

(6) Do you think that there is scope for improvement in the business management of the ghani-oil industry, *e.g.*, better organisation, reduction in the unit cost of production, use of electric power, cheaper cost of acquisition of raw material, increased productive capacity, more efficient and economic marketing arrangements, addition of side-lines like manufacture of soap, paints, lubricants, varnishes, toys etc.? If so, please give your recommendations in detail taking into account the existing conditions of working of the ghani oil industry and indicating by figures how the industry will be helped.

(7) Do you think that with the adoption of the improvements that you may wish to suggest at questions (1) and (2), the ghani oil industry will be able to compete successfully with the mill oil industry? If so, please give figures of the cost of production, the margin of profit and the wholesale and the retail prices at which oils of different varieties will be sold as compared to the prices at which the oil mills produce the oils and sell them.

(8) Do you think that it is possible to avoid fluctuations in prices of oil-seeds or at least to reduce the range of such fluctuations? If so, what effective steps would you suggest in the interests of ghaniwallas in this respect?

(9) With a view to encouraging the ghani oil industry do you recommend that the starting of new oil-mills should be banned? If you consider that setting up of new oil mills should be regulated if not totally banned, what manner of regulation would you propose?

(10) With a view to securing provincial self-sufficiency in the matter of oil-seeds and oil requirements of the Province, what steps, in your opinion, would be necessary so far as exports and imports of oils and oil-seeds are concerned?

(11) If you think that by regulation of the mill oil industry, scope can be found for the expansion of the ghani oil industry, what would you suggest to achieve this end? Do you think that ghani oil industry can entirely replace the mill oil industry without affecting the interests of the consumers of edible and non-edible oil?

(12) What measures would you suggest generally to guarantee full employment in the ghani oil industry, increase in the incomes of men engaged in it, simultaneously with the continuance of the mill oil industry, with or without regulation.

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A NOTE ON THE GHANI OILCRUSHING INDUSTRY

In the Province of Bombay, sent by Principal D. G. Karve in reply to the Questionnaire sent by the Committee.

GENERAL

1. The granting of protection to ghani oil-pressing industry in Bombay Province may, directly or indirectly, involve diverse issues of inter-provincial and inter-state character. As the production of and trade in oilseeds, as well as the oil-pressing industry, are spread out, in varying proportions, almost all over India, unilateral action of any kind by a single Government may not prove effective. For instance, apart from its effect on the price parity in the province itself, any attempt by a Provincial Government to stabilise prices of oilseeds alone may not bear fruit unless and until exports from and imports into the province are also strictly controlled. Similarly, any restriction or ban on the starting of new oil-mills in the province or regulation of the existing concerns will have no meaning if export and import of oil-seeds and oil were also not controlled. Solution of these and such other important questions will largely depend upon the policy and attitude that the Central, Provincial and State Governments might adopt in this connection. It seems as if the whole question of protection to cottage industries as against their corresponding mechanical and organised rival industries, especially when both of them are diffused in different provinces and states, need to be considered and solved on all-India basis.

2. The Government of Bombay may do well to refer this question to the Government of India. It would be highly desirable, and necessary too, that the Government of India first declared in clear terms its policy about certain cottage industries that are facing direct or indirect competition from the corresponding mechanically organised industries in and outside the country. Once this is done, it would be safer and easier for Provincial Government to follow the lead and fit in their industrial policy with the policy of the Government of India. For instance, in the case of Ghani oilcrushing industry, let us suppose that the Bombay Government decided to stabilise prices of oilseeds in the interest of ghaniwallas. Such attempt will not be successful unless tne Government of India set a pattern of prices, as an integrated part of the general economic and industrial policy of the country, and the Government of Bombay fitted its price policy into it with necessary local modifications.

3. There is another direction in which the Government of India's active co-operation will be needed. Prices of oil seeds fluctuate on account of international forces and also of seasonality. It has been a matter of common knowledge that prices of oilseeds more particularly of groundnuts, at Madras and Bombay generally move up and down in sympathy with their London prices and that export prices of oilseeds influence considerably their internal prices. It is high time for the Government of India to make up its mind as to the policy that it desires to pursue in this connection. If it decides, as it should, to protect internal prices of oilseeds from the effects of external price fluctuations, it should either assume all trading on export account in oilseeds in its own hands, or set up a Government corporation for this purpose. "The aim of such a policy would, in the first instance, be to assure a steady and fair price to the domestic producer, to keep in check the rise of prices to the domestic consumer and to obtain for the community as a whole any special margin of profit that may remain between the internal and external price."

4. Once the prices of oilseeds are secured from external factors, the range of fluctuations in prices due to seasonality can be reduced. Difference in quality—i.e., purity and dryness and uneven flow into the market of supplies of oilseeds mainly account for the local fluctuations in prices. To encourage producers to market fully mature and dry crop and to bring about a more even flow of supplies on the market by co-operative and other organisations providing facilities of finance to producers is a step likely to minimise seasonal variations in prices of oilseeds. Another way of directly helping ghaniwallas to get the necessary oilseeds all the year round is for the Government to store seeds during the harvest season and give them out on reasonable terms to the telis. The Government will have to undertake and organise, on the lines of Public Country Elevators of the United States of America, both the financial and distributive functions for the ghaniwallas. If in any area it is felt that co-operative supply agencies could be formed for this purpose the experiment would be worthwhile.

5. I cannot subscribe to the view that for encouraging the ghani oil industry the starting of new oil mills should be banned. In the absence of any ban on the import of oil from other provinces and states, any step in the above direction will hit the oil industry in the Province without in any way benefitting the local ghani oil industry. Supposing that such a ban on the import of oil was imposed, the existing oil mills will be put in a quasi-monopoly position. As there will be no effective competition between oil mills and ghanis, interest of the consumer will be hit hard. Again, in the interest of the ghani oil industry itself total elimination of

competition from the mechanised industry may bar its progress towards securing economy and efficiency in production. What is desired is elimination of unfair competition between the oil mills and the ghani, without removing at the same time the urge for the latter to rationalise.

6. The banning of new oil mills is not advisable from the point of view of production of oil and encouragement to the seed grower. It is said that the production per day of a rotary mill and an expeller is 5-6 times and about 45 times respectively more than that of a ghani. It may prove very uneconomic to meet oil requirements for edible and industrial purpose in India with the help of ghanis alone. The expansion of ghani oil industry at the cost of mill industry will, therefore, be an impractical as well as impracticable proposition.

7. The starting of new oil mills in Bombay province should not be banned. It should be suitably controlled and regulated. Private enterprise in this field should not be artificially encouraged. The starting of oil mills on co-operative basis preferably by oilmen themselves, should receive all kind of encouragement and help at the hands of Government. The same should apply to co-operative ghani oil crushers' societies, if any are started.

8. The oil mill industry should further be controlled and regulated in the following ways :—

(a) The starting of new mills and expansion of existing ones should be directed by the issue of licences.

(b) Mills should not be allowed to crush such seeds as safflower, gingelly, etc., in which they have no mechanical advantage worth the name which ghanis have.

(c) Oil mills should be forced to send regular monthly returns to Government as regards amounts and types of seeds crushed, stock of each type of seed etc. This should apply to ghanis also though the agency in this case may have to be differed.

(d) They should be made to sell oil in the manner and quality prescribed so as to make its use for adulteration purposes impossible.

(e) Expansion of existing private oil mills should be strictly regulated by following a well-thought out licence policy.

9. As against the control and regulation of the oil mill industry in the manner mentioned above, the ghani oil industry should receive encouragement from Government in the following ways :—

(i) The ghani industry should be helped in all possible manner to increase its crushing capacity by using improved types of ghanis.

(ii) The ghaniwallas should be encouraged to undertake production on co-operative basis by supplying them all the year round the requisite quantities of oilseeds at reasonable rates.

(iii) The ghaniwallas should be made to maintain the pure quality of their oils. This can be done by penalising them heavily for adulterating inferior quality of oils. They are likely to get a certain number of customers even at a higher price, if the quality of the oil was guaranteed. Direct assistance to ghani industry should take the form of ensuring supply, offering technical advice and helping in marketing. Cash subsidies should not be given as they are harmful to efficiency.

Sd. D. G. Karve.

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APPENDIX B.

Abstract of crushing charges for one pound of oil-seeds in some of the mills in Bombay City and the mofussil as also at some oil centres using bullock-driven ghanis.

(N.B.—For further information, please see the accompanying detailed statements.)

Description of the mill and its location 1	Pies per lb of oil produced 2	Remarks 3
Mills :—		
(1) A mill in Bombay using 6 expellers for 24 hours a day.	4.1	Groundnut seeds
(2) A mill in Bombay using 4 expellers for 24 hours aday	8,5	,,
(3) A mill in Bhusawal taluka using 6 rotary ghanis and working for 8 hours a day.	5.8	,,
(4) A mill in Bhusawal taluka using 1 expeller for 8 hours a day	13.3	,,
(5) A mill at Jalgaon using 3 expellers for 8 hours a day	4.4	
Bullock-driven ghanis :—		
(1 Ghanis working at Jalgaon	22	Groundnut seeds
(2) do Bhusawal dist. East Khandesh	20.3	,,
(3) do Khed, dist. Poona	25.5	,,
(4) do Charegaon, dist. Satara	17.00	,,
(5) do Sholapur	16.00	,,
(6) do Pandharpur, dist. Sholapur	15.00	,,
(7) do Supe, dt, Poona	17.00	Safflower
(8) do Bijapur	16.00	,,

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Crushing charges of a Bombay mill working 6 Expellers for 24 hours a day based on one month's production (25 days).

The crushing charges in respect of 7,080 bags equivalent to 514 tons of kernels crushed during the month—

	Rs.	a.	p.
1. Direct labour	2,412	0	0
2. Electric energy	600	0	0
3. Furnace, oil and other engine, exp ...	1,350	0	0
4. Office establishment, pay of clerks and other overhead charges ...	675	0	0
5. Boiler attendant	480	0	0
6. Godown rent	900	0	0
7. Depreciation of machinery at 10% (cost of the machinery being Rs. 2,25,000)	1,875	0	0
8. Interest on capital of 2 lakhs invested in raw materials and stocks at 9% ...	1,500	0	0
Total crushing charges	9,792	0	0

	Rs.	a.	p.
The total crushing charges for 514 tons of kernels yielding 200 tons of oil and 305 tons of cake would, therefore, be ...	9,792	0	0

The crushing charges for one maund of oil would, therefore, be Rs. 1-11-11 and the crushing charges for one pound of oil would therefore be 4.1 pies.

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Crushing charges of a Bombay mill working 4 Expellers for 24 hours a day based on one month's production (25 *days*).

The crushing charges in respect of 450 tons of kernels are as below :—

		Rs.	a.	p.
1.	Direct labour, including supervisory labour	3,500	0	0
2.	Repairs	2,100	0	0
3.	Fuel	900	0	0
4.	Electricity	700	0	0
5.	Cartage inwards	1,500	0	0
6.	Rent	2,500	0	0
7.	Barrels, package depreciation ...	150	0	0
8.	Interest on stock	1,500	0	0
9.	Depreciation on machinery at 10% of Rs. 2,34,564/- which is the cost of machinery	2,300	0	0
10.	Godown charges	1,200	0	0
11.	Boiler house expenditure ...	400	0	0
12.	Insurance charges ...			
13.	Administrative expenses (office establishment and overhead charges) ...	1,200	0	0
	Total crushing charges ...	18,100	0	0

The total crushing charges for 450 tons of kernels yielding 180 tons of oil and 243 tons of cake would, therefore, be 18,100 0 0

The crushing charges for one maund of oil would, therefore, be Rs. 3-9-5 and the crushing charges for one pound of oil would, therefore, be 8.5 pies.

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One oil mill working six rotary ghanis for eight hours per day. ... BHUSAWAL East Khandesh Dist.

		Rs.	a.	p.
1.	Cost of 24 pallas of nuts at Rs. 57-8-0 per palla	1,380	0	0
2.	Wages of labourers	15	10	0
3.	Pay of manager, engineer and other staff	9	0	0
4.	Expenditure on engine, *viz.*, crude oil, mobil oil, etc.	18	0	0
5.	Depreciation and repairs & other charges	15	4	0
	Total ...	1,437	14	0

Sale poceeds of one day's production—

	Rs.	a.	p.
24 maunds of oil at Rs. 59/- per maund ...	1,416	0	0
Sale proceeds of 30 mds. cake	140	0	0
Miscellaneous ...	6	0	0
Total ...	1,562	0	0

The cost of crushing 1 lb. of oil is, therefore, 5.8 pies.

Cost of production of one day's unit (viz 66 *maunds of groundnut crushed) a mill working one expeller for 8 hours a day.* BHUSAWAL TALUKA Dist. East Khandesh.

		Rs.	a.	p.
1.	Cost of 66 maunds of nut at Rs. 57 per palla	1,254	0	0
2.	Wages of labourers, including engineering and other workers ...	14	12	0
3.	Overhead charges for other staff ...	14	0	0
4.	Fuel, oil and other engine expenses ...	35	0	0

	Rs.	a.	p.
5. Rent per day	2	0	0
6. Interest on borrowed capital ...	26	0	0
7. Depreciation and repairs at 10% on fixed capital on the basis of 150 working days	30	0	0
Total ...	1,375	12	0

	Rs.	a.	p.
Sale proceeds of 1 day's production, *viz* :			
22 maunds of oil at Rs. 58 per md.	1,276	0	0
Sale proceeds of 28 mds. of oilcake	120	0	0
Total	1396	0	0

The cost of crushing 1 lb. of oil is, therefore, 13.3 pies.

Cost of production of one day's unit at a mill working three expellers for 8 hours a day.

JALGAON
Dist. East Khandesh.

	Rs.	a.	p.
1. Cost of 75 pallas at Rs. 19-8-0 per md.	4,387	8	0
2. Wages of 22 labourers	29	0	0
3. Pay of engineer, fireman, fitter ...	8	0	0
4. Pay of manager, cashier, clerks and other overhead charges ...	17	0	0
5. Engine expenses, *viz.*, crude oil, mobiloil, and also depreciation at Rs. 13 per day	29	0	0
6. Interest on working and fixed capital at 4%	55	8	0
Total ...	4,526	0	0

	Rs.	a.	p.
Sale proceeds of 75 maunds of oil	4,200	0	0
Sale proceeds of relevant cake at Rs. 130 a ton ...	433	0	0
Total ...	4,633	0	0

The cost of crushing 1 lb. of oil, is, therefore, 4.4 pies.

Cost of production of 3 Bengali maunds 1 (Palla) of groundnuts which can be crushed in two days.

CENTRE : JALGAON
Dist. East Khandesh

		Rs.	a.	p.
(1)	Purchase of raw materials (including Re. 1 by way of interest if purchased on credit).	58	0	0
(2)	Maintenance charges of bullocks ...	3	0	0
(3)	Wages to labourers	3	0	0
(4)	Interest, rent, depreciation and repairs	1	0	0
	Total. ...	65	0	0
	Sale price of 30 seers of cake ...	43	8	0
	,, 90 ,, cake ...	23	8	0
	Total. ...	66	0	0

The cost of crushing 1 lb. of oil is, therefore, 22 pies.

Working expenses of a unit of 3 Bengali maunds of groundnut which can be crushed in two days.

CENTRE :
BHUSAWAL
Dist East Khandesh

		Rs.	a.	p.
(1)	Raw materials—Purchase of ...	57	0	0
(2)	Maintenance charges of bullocks ...	3	0	0
(3)	Wages of labourers	3	0	0
(4)	Rent, depreciation, repairs, etc. ...	1	0	0
	Total. ...	64	0	0
	Sale price of 33 seers of oil	47	0	0
	,, 74 ,, cake ...	18	8	0
	Total. ...	65	8	0

The cost of crushing 1 lb
of oil is, therefore, 20.3 pies.

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Cost of a unit of production of three days' groundnut crushing.

KHED CENTRE
District Poona.

		Rs.	a.	p.
(1)	For three maunds of oil seeds ...	66	0	0
(2)	Cost of maintenance of bullocks for 3 days.	4	8	0
(3)	Wages that may me paid to the † oilman who works the ghani himself.	4	8	0
(4)	Interest charges on the capital ... expenditure for three days.	0	6	0
(5)	Probable rent for housing ghani ... for 3 days.	0	10	0
(6)	Repairs (based on Rs. 30 per annum of the total repairs that have to be effected during the year)	0	5	0
(7)	Depreciation charges	0	5	0
	Total ...	76	10	0

Sale price of 1 maund of oil is ...	60	0	0
Sale price of 2 maunds of cake is ...	20	0	0
Total sale proceeds of 3 days production	80	0	0

The cost of crushing 1 lb. of oil is, therefore, 25 1/2 pies.

Cost of a unit of production of one day's groundnut crushing, i.e., *for 56 seers of groundnut.*

CENTRE :
CHAREGAON,
Dist. Satara.

		Rs.	a.	p.
(1)	Purchase of 65 seers of oilseeds ...	22	0	0
(2)	Maintenance of bullocks	0	12	0
(3)	Interest paid on capital	0	6	0
(4)	Wages paid to labourers	1	4	0
(5)	Repairs (annual repairs Rs. 40) ...	0	3	0
(6)	Depreciation charges	0	3	0
	Total ...	24	7	6

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Sale price of one day's production, *viz* :

14 seers of oil	...	16	2	0
42 seers of cake	...	9	6	0
Total	...	25	8	0

The cost of crushing 1 lb. of oil is, therefore, 17 pies.

Working expenses of two Bengali maunds of seeds crushed producing 3/4*th maund of oil* 1 1/4 *maunds of cake.*

CENTRE :
SHOLAPUR.

		Rs.	a.	p.
1. Purchase of oil seeds	... ...	49	0	0
2. Maintenance charges of bullocks for one day	... ...	2	0	0
3 Wages paid to labourers for one day, other incidental charges, repairs to ghanis, and depeciation charges	...	3	0	0
Total	...	54	0	0

Sale price of 3/4th maund of oil	...	41	8	0
1 1/4 maund of cake	...	12	8	0
Total	...	54	0	0

The cost of crushing 1 lb. of oil is, therefore, 16 pies.

Cost of production of one day's unit of groundnut.

CENTRE :
PANDHARPUR.
Dist. Sholapur.

		Rs.	a.	p.
1. Purchase of raw materials (2 maunds of nuts)	... ...	50	0	0
2. Cost of maintenance of bullocks	...	2	8	0
3. Interest on working capital of Rs. 56 per day	... ...	0	1	0
4. Wages of the labourer	... ...	1	12	0
5. Depreciation and repairs	... ...	0	3	0
Total	...	54	8	0

Sale price of 3/4th maund of oil	...	42	8	0
and of 1 1/4 maund of cake	...	10	0	0
Total	...	52	8	0

The cost of crushing 1 lb. of oil, is, therefore, 15 pies.

Working expenses per day for a unit of 1 maund of safflower oil.

CENTRE : SUPE
Dist. Poona

			Rs.	a.	p.
1.	Purchase of 4 1/2 maunds of safflower	...	80	0	0
2.	Maintenance charges of bullocks	...	2	12	0
3.	Wages paid to labourers	...	4	0	0
4.	Repairs (based on annual repairs of Rs. 60)		0	3	0
5.	Depreciation on fixed assets per day	...	0	2	0
	Total	...	87	2	0

Sale price of 1 maund of oil	...	66	0	0
Sale price of 1 1/4 maund cake	..	14	0	0
Total	...	80	0	0

Note.—It is only during the season that telis sell their oil at profit; this is the fag end of the season and hence the loss.

The cost of crushing 1 lb. of oil is, therefore, 17 pies.

Working expenses per unit of 1 bag of safflower containing 182 lbs. of safflower crushed in a day.

CENTRE : BIJAPUR

			Rs.	a.	p.
1.	Purchase of raw materials	...	37	15	3
2.	Maintenance charges of bullocks	...	1	4	0
3.	Interest paid	... ...	0	3	9
4.	Wages paid to labourers	... ...	1	11	0
5.	Repairs (annual repairs Rs. 75) and depreciation (annual depreciation Rs. 50)		0	2	0
	Total	...	41	4	0

Sale price of 41 1/2 lbs. of oil	...	32	6	6
Sale price of 48 lbs. of cake	...	7	0	0
Sale price of husk	...	0	8	0
Total	...	39	14	6

The cost of crushing 1 lb. of oil is, therefore, 16 pies.

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Name of the Telí, with place of residence, taluka and district.	Capital expenditure for the purchase of				Working expenses per year.			
	Ghanis	Bullocks.	Other tools & equipment if any, and working shed.	Total capilal expenditure.	Purchase of raw materials such as oil-seeds etc.	Maintenance charges of bullocks.	Interest paid on borrowed capital.	Wages paid to labourers if any are employed.
1	2 Rs.	3 Rs.	4 Rs.	5 Rs.	6 Rs.	7 Rs.	8 Rs.	9 Rs.
CENTRAL DIVISION								
1. M. NAGU PARAPPA TELI, of Mohol, dist. Sholapur.	900	2000	600	3500	54000	4000	250	400
2. Mr. N. S. TELI, of Ghodeshwar, tal. Mohol. dist. Sholapur.	500	800	400	1700	13500	700	—	400
3. Mr. V. K. PAWAR, of Jawale, tal. Sangamner, dist. Nagar.	100	125	119	344	725	200	—	100
4. Mr. B. G. TELI, Koregaon, dist. Satara.	100	300	150	550	2000	200	12	—
5. Mr. R. B. TELI, dist. East Khandesh.	—	—	—	18000	—	—	—	—
SOUTHERN DIVISION								
6. Mr. M. Y. GANIGAR, Navalgund, dist. Dharwar	100	50	50	200	5400	360	60	90
7. Mr. H. T. RULANIKAR, Betgeri, Gadag, dist. Dharwar.	300	900	2325	3525	30000	1750	—	1250
8. Mr. M. K. DAKHANI, Muddebihal, dist. Bijapur.	500	700	220	1420	14500	1460	—	580
9. Mr. B. G. BORDEKAR, Kankavli, dist. Ratnagiri.	150	400	200	750	1200	400	—	—
10. Mr. S. B. SAJJAN, Bagewadi, dist. Bijapur.	200	250	225	774	6000	400	—	650
NORTHERN DIVISION								
11. Mr. K. A. KADODIA, Valod, dist. Surat.	155	800	160	1115	13820	1320	—	270
12. Mr. N. J. GHACHIWALA, Prantij, A'bad. dist.	100	500	75	675	4000	200	—	—
13. Mr. CHUNILAL JIVABHAI Talod Bazar.	200	300	100	600	4000	400	—	—
14. Mr. KAVAL MAKAN, Svdla.	75	400	80	555	1900	360	—	—

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			Out of capital expenditure & working expenses what amount represents		Total sales effected during the year.						
					Of oil		Of oil cakes		Other by-product].		Net profit or los made in the business during the year.
Other incidental charges (rent for godowns & premises).	Repairs to ghanis & depreciation of fixed & wasting assets.	Total working expenses.	Owned funds of the oilmen.	Borrowed funds.	Quantity.	Amount.	Quantity.	Amount.	Quantity.	Amount.	
10 *Rs.*	11 *Rs.*	12 *Rs.*	13 *Rs.*	14 *Rs.*	15 *mds.*	16 *Rs.*	17 *mds.*	18 *Rs.*	19 *mds:*	20 *Rs.*	21 *Rs:*
—	450	62700	2000	6000	10080	57000	1800	16200	—	—	+10500
—	125	14725	4000	—	225	11925	375	3400	—	—	+600
—	50	1075	—	—	20	1000	—	240	—	—	+165
40	65	2317	2667	200	—	1950		575			+208
—	—	19080	—	—	216	12960	648	6480	—	—	+360
—	50	5950	5000	1000	87	5400	94	926	90 bags	135	+511
815	300	33950	—	—	—	28125	—	5625		750	+56
120	100	16760	*All*	—	930	12950	1860	4880	—	—	+104
—	20	1620	750	—	19	1748	40	720			+84
—	65	7115	3500	—	—	6000	—	1500	—	—	+3
50	100	18560	—	—	164	13120	244	3904			+14
—	30	4230	4905	—	50	4500	75	900	—	—	+1

APPENDIX D

STATEMENT SHOWING THE AREA AND OUTTURN OF *GROUNDNUT*
for the years 1939–40, 1943-44 and 1947-48.

No.	District	1939-40		1943-44		1947-48	
1	2	3	4	5	6	7	8
		Area	Outturn	Area	Outturn	Area	Outturn
	GUJARAT						
1.	**Ahmedabad**	35,877	5,873,	41,758	10,435	48,833	11,620
2.	**Kaira**	37,115	5,522	27,839	9,321	23,442	6,624
3.	**Broach**	101,195	22,212	1547	21,089	64,692	21,660
4.	**Panch Mahals**			69,316			
5.	**Surat**	4,475	1,548	2657	929	1,864	717
	Total Gujarat	178,662	35,155	143,117	41,774	140,386	41,026
	DECCAN						
6.	West Khandesh	119,510	24,898	97,873	20,390	202,580	43,234
7.	East Khandesh	359,367	108,288	349,293	128,446	367,395	110,711
8.	Nasik	56,662	13,427	79,503	20,704	125,184	28,180
9.	Ahmednagar	49,778	13,889	34,564	11,572	18,083	76,018
10.	Poona	32,114	83,057	22,609	84,010	20,228	56,010
11.	Sholapur	132,517	19,581	102,307	30,457	107,505	33,437
12.	Satara	213,046	142,666	187,804	95,378	165,619	65,300
	Total Deccan	962,984	331,106	873,953	315,557	1008594	293,090
	KARNATAK						
13.	Belgaum	128,332	66,858	141,637	82.990	140,114	63,864
14.	Bijapur	163,075	72,802	113,139	58,927	296,035	132,159
15.	Dharwar	82,367	47,178	98,046	60,835	121,427	63.243
	Total Karnatak	373,774	186,838	345,622	202,752	557,576	259.266
	KONKAN						
16.	Thana	34	...	35	...	...	...
17.	Bombay Suburban	...	...	...	...	...	...
18.	Kolaba	...	...	3	...	...	...
19.	Ratnagiri	189	...	185	...	...	...
20.	Kanara	250	...	293	...	...	...
	Total Konkan	473	155	516	215	445	135
	TOTAL BOMBAY PROVINC E	1,515,893	553,254	1363,208	560,298	1707,007	593,517

Statement showing the area and outturn of *sesamum* for the years 1939-40, 1943-44 and 1947-48 and the area for *safflower* for the year 1947-48.

No.	District	SESAMUM						SAFFLOWER
		1939 40		1943-44		1947-48		
1	2	3	4	5	6	7	8	9
	GUJARAT							Area in acres for the year 1947-48
1.	Ahmedabad	42,495	3,606	31,834	3,411	49,152	5,502	82
2.	Kaira	9,223	688	15,637	2,325	13,613	1,625	2
3.	Broach	13,403	762	11,415	1,973	6,568	512	...
4.	Panch Mahals			11,024		7,903	897	94
5.	Surat	1,516	197	1,551	201	1,240	172	...
	Total Gujarat	66,637	5,253	71,491	7,910	78,493	8,708	178
	DECCAN							
6.	West Khandesh	16,170	1,928	14,267	1,911	19,891	2,367	91
7.	East Khandesh	8,551	1,271	7,362	1,205	7,384	989	1,277
8.	Nasik	7,800	1,000	6,885	921	5,849	522	3,522
9.	Ahmednagar	13,849	1,484	16,072	2,152	11,670	1,411	126,625
10.	Poona	5,377	481	3,336	447	2,544	265	55,879
11.	Sholapur	5,274	235	8,992	803	9,500	988	73,649
12.	Satara	486	44	250	33	196	18	2,437
	Total Deccan	57,507	6443	57,164	7,472	57,024	6,560	281,480
	KARNATAK							
13.	Belgaum	2,212	265	1,817	334	2,231	199	20,222
14.	Bijapur	11,086	824	17,432	1,816	18,914	1,410	77,182
15.	Dharwar	6,243	650	12,815	1,716	12,414	1,108	37,236
	Total Karnatak	19,541	1,739	32,064	3,748	39,559	2,717	134,640
	KONKAN							
16.	Thana	1,083	108	1,019	...	...	...	...
17.	Bombay Suburban	...	...	...	...	...	...	...
18.	Kolaba	3,149	316	2,721	334	2,453	297	...
19.	Ratnagiri	10,336	1,037	263	26	1,752	746	...
20.	Kanara	...	...	90	111	1,248	137	...
	Total Konkan	14,568	1,461	4,093	471	11,653	1,080	...
	TOTAL BOMBAY PROVINCE	158,253	14,896	164,782	19,601	180,739	19,165	416,298

APPENDIX E

Statement showing the freight rates for oilseeds, edible oils and oilcake.

	Oilseeds viz :- Aniseed, castor, cotton, flax, kusum, linseed, mohwa mustard, nim, polang, poppy, pungam, rape, tara, taramira.		*Edible oils* (Oils, Div-D) viz :- Coconut oil, N. O. C. Cotton seed, Gingelly oil, Groundnut oil, N. O. C. Vegetable oils N.O.C.		Oil cake.	
Rate per maund per mile.	Pie per maund per mile ·48 for the first 300 miles. ·35 for the next 300 miles. ·23 for distances beyond.		Pie per maund per mile ·58 for the first 300 miles. ·54 for the next 300 miles. ·49 for distances beyond.		Pie per maund per mile ·25 for the first 100 miles. ·20 for the next 100 miles. ·15 for distances beyond.	
Standard terminals per maund.	12 pies		16 pies		12 pies	
Charges per maund for	Per maund		Per maund		Per maund	
	Rs. as. ps.		Rs. as. ps.		Rs. as. ps.	
100 miles	0 5 0	W/450 BG W/300 MG W/180 NG RR.L	0 6 2	OR	0 3 1	W/450 BG W/300 MG W/180 NG O. R. L.
200 ,,	0 9 0		0 11 0		0 4 9	
300 ,,	0 13 0		0 15 10		0 6 5	
500 ,,	1 2 10		1 8 10		0 9 4	
700 ,,	1 7 8		2 1 5		0 11 10	

Note:–Symbols used above have the following meaning.

1. **B.G.**-Means Broad Gauge; 2. **M.G.**-Means Metre Gauge; 3. **N.G.**-Means Narrow Gauge; 4. **O.R.**-Indicates that the rate applies at owner's risk: 5. **L.**-Indicates that the loading & unloading must be performed by consignors & consignees in accordance with Rules in the Goods Tariff.

W:- Followed by a figure indicates the minimum in maunds per four wheeled wagon to which the rate applies.

APPENDIX - F

IMPORTS AND EXPORTS OF OILSEEDS, VEGETABLE OILS AND OILCAKES IN THE PROVINCE OF BOMBAY.

Figures in 000 tons.
( ) net imports, (-) net exports.

Item		IMPORTS				EXPORTS				( ) NET IMPORTS, (-) NET EXPORTS.			
Item		Average 3 years ending 1941-42.	1942-43	1943-44	1944-45	Average 3 years ending 1941-42	1942-43	1943-44	1944-45	Average 3 years ending 1941-42	1942-43	1943-44	1944-45
1		2	3	4	5	6	7	8	9	10	11	12	13
1. Ground nuts.	Rail	201.1	224.3	232.1	272.2	1.0	108.3	21.0	38.6				
	Sea	...	...	...	...	72.6	53.9	1.8	...				
	Total	201.1	224.3	232.1	272.2	73.6	162.2	22.8	38.6	+ 127.5	+ 62.1	+ 209.3	+ 233.6
2. Rape & Mustard	Rail	3.3	3.8	2.9	3.2	0.1	0.5	6.3	5.6				
	Sea	...	...	...	...	1.0	0.4	0.2					
	Total	3.3	3.8	2.9	3.2	1.4	1.5	6.7	5.8	+ 1.9	+ 2.3	− 3.8	− 2.6
3. Sesamum	Rail	13.7	22.3	8.9	15.4	2.8	2.6	6.6	3.6				
	Sea	...	...	...	...	2.5	8.0	2.6	1.3				
	Total	13.7	22.3	8.0	15.4	5.3	11.4	9.2	4.9	+ 8.4	+ 10.9	− 1.2	+ 10.5
4. Cotton Seed.	Rail	104.7	71.3	54.2	49.9	25.2	24.3	9.4	7.2				
	Sea	...	...	...	...	...	0.1	0.1	...				
	Total	104.7	71.3	54.2	49.9	25.2	24.4	9.5	7.2	+ 79.5	+ 46.9	+ 44.7	+ 42.7
5. Castor Seed.	Rail	25.1	22.1	13.7	19.4	0.4	0.2	0.2	3.3				
	Sea	...	...	...	...	14.4	13.1	7.1	5.5				
	Total	25.1	22.1	13.7	19.4	14.8	13.3	7.3	8.8	+ 10.3	+ 8.8	+ 6.4	+ 10.6
6. Linseed	Rail	115.5	69.7	16.1	107.7	0.2	0.1	1.2	10.3				
	Sea	0.1	...	...	...	113.7	95.0	26.4	71.4				
	Total	115.6	69.7	16.1	107.7	113.9	95.7	27.6	81.7	+ 1.7	− 26.0	− 11.5	+ 26.0
7. Vegetable oils.	Rail	34.0	50.4	62.0	69.0	44.7	32.3	51.3	55.8				
	Sea	5.7	1.5	5.8	N. A.	8.9	9.6	0.5	N.A.				
	Total	39.7	51.9	67.8	69.0	53.6	41.9	51.8	55.8	− 13.9	+ 10.0	+ 16.0	+ 13.12
8. Oil Cakes.	Rail	45.2	29.0	84.0	96.8	8.1	7.5	73.5	80.8				
	Sea	...	...	...	...	99.9	38.8	14.0	...				
	Total	45.2	29.0	84.0	96.8	108.0	46.3	87.5	80.8	− 62.8	− 17.3	− 3.5	+ 16.0

APPENDIX G

A scheme for conducting a soap manufacturing centre on a small scale (medium size unit) prepared by the chemist in charge of the Village Industries Research Laboratory, Poona 5.

Out of the methods used for manufacture of washing soap, semi-boiled process is recommended on either cottage or small scale (medium unit). Graining process being a complicated one requires the supervision of skilled technician and therefore is not advisable at the beginning at least.

Hence the estimates are given of a medium unit by semi-boil process.

Non-recurring expenditure :—

Unit 1200 lbs. of soap net per day.

		Rs.	a.	p.
1.	Soap pan ...	600	0	0
2.	Soap Moulds 20, at Rs. 46 each	900	0	0
3.	Double cutting machine ...	1350	0	0
4.	Soap stamping machine ...	950	0	0
5.	Bar soap die with gun metal	325	0	0
6.	Various dies for cakes ...	300	0	0
7.	Toilet soap die ...	180	0	0
8.	Plodding machine (approx. hand driven) ...	2000	0	0
9.	Miscellaneous ...	500	0	0
		7105	0	0

Recurring expenditure :—
Rent

Rent of the building at Rs. 200 ...	200	0	0			
				200	0	0

Raw materials :—

1.	Oils 800 lbs. per day at Rs. 1-10-0	... 16250	0	0			
2.	Caustic soda 200 lbs. at Rs. 6 (per day).	... 1875	0	0			
3.	Miscellaneous (scents, colour, rosin, etc.)	... 475	0	0			
4.	Fuel	... 1000	0	0			
					19600	0	0

Labour :—

1.	Technician at Rs.	... 125	0	0	p.m.			
2.	Foreman at Rs.	... 75	0	0	,,			
3.	Male labour 8 at Rs. 2	... 400	0	0	,,			
4	Female labour 6, at Re. 1 per day.	... 150	0	0	,,			
						750	0	0

Interest and depreciation :—

Interest at 6% on non-recurring expenditure (Rs. 7105) ...	35	0	0			
Depreciation on non-recurring expenditure at 10% per annum...	59	3	0			
Interest on working capital for raw materials other than oil for a stock for 3 months on Rs. 7,500 at 6%	37	8	0			
				132	3	0

Sundry :—

Packing	500	0	0			
				500	0	0
Total recurring ...				21,182	3	0

It is estimated that about 1,200 lbs. soap will be produced per day. Making allowance for cuttings and waste etc. 1,100 lbs. of ready soap may be expected for marketing.

As the unit is considered to be comparatively a bigger one, allowances will have to be made for transportation and commission, etc. Current rates are taken on an average as the soap would be fairly good quality and the producer may get about 13 as. per lb. (excluding commission, etc.)

Total production $\frac{1100 \times 13 \times 25}{16}$	22,343	0	0
Total expenditure (recurring)	21,182	3	0
Profit per month ...	1,160	13	0

Taking into consideration the variations as regards labour charges, transportation and materials, and machinery, etc., even if this margin goes down considerably it will all the same be fairly good, the purity of the soap being maintained at a reasonably high level.

Incidentally the small quantity of toilet soap that may be produced with the help of the plodding machine included in the equipments may help to increase the margin estimated above.

No provision for interest on working capital for purchase of oil has been made as it is taken for granted that the ghaniwallas may make a provision for the oil-seeds in their routine working and the oil extracted will be partly used for soap manufacture.

APPENDIX H.

TECHNIQUE OF OIL PRODUCTION

Ghanis :—

The equipment consists of a wooden pestle and a wooden, stone or granite mortar. The pestle is connected to a shaft to which a bullock is yoked. Pressure applied to the pestle is regulated by means of a lever and weights. As the bullock circumambulates the oil-seeds are crushed in the mortar by the rotation of the pestle. The crushing capacity is 96 lbs to 180 lbs for eight hours a day, and the working days vary from 120 to 240 days in a year. In the improved variety called the Haskell ghani, which was first invented in Bombay Province in 1940 and later on improved with research in the Village Industries Experimental Workshop in Poona, a super-structure was added in 1946 with arrangements to enable the ghani to be driven by bullocks or electrocity if and when the latter is available. The prospects of getting electricity for motive power in rural areas is not very bright until the Bombay Electric Grid system and the utilization of electrical power from Jog actually materialises. The two inch diameter ball bearings were replaced with one inch diameter double row ball bearings with an improved method of suspension and an improved weight beam. Experiments are also being carried on in the workshop for designing a suitable reinforced concrete cement mortar.

The oil from the ghani flows from a hole provided in the mortar into a container but sometimes it is scooped or taken out by soaking the cloth which is squeezed into the container. A small quantity of water is generally added to facilitate extraction. Elaborate filtering of the oil is not common. Water is sometimes added to the oil for its clarification. The mixture is shaken, allowed to settle and the clear oil on top is decanted. The percentage of extraction of oil varies from 33 1/3% to 40%.

Rotary ghanis :—

This is mounted on a substantial framework foundation and the motive power is either electricity or power from diesel oil and steam engines. It resembles to a large extent the Kulu ghani which we have described above, with this difference, that, in a rotary both the pestle and the mortar revolve, the former being held tightly against the inside of the mortar by means of a chain and a screw tightener, whereas in a Kulu ghani the mortar is stationary. The oil flows into a battery of containers. The residue of the oil seeds after the oil is crushed is removed from the mortar. The preparatory work, *viz.*, removal of foreign substances, scalding the beans by heat, etc., is mostly done by hand. Both the cold and hot processes are utilised. The cost of equipment with power roughly comes to Rs. 1500. It is cheaper to utilise a unit of multiple rotary ghanis rather than small units of one or two ghanis though from the figures given in Chapter II it seems that on an average about two rotary ghanis form a unit although sometimes there are as many as seven rotary ghanis in one mill.

The average capacity of a rotary ghani is about 1/2 ton of seeds for a working day of 24 hours. The oil extraction index is 38 to 39 per cent. The only disadvantages, as pointed out by Mr. Yuill, are "firstly the fact that too much discretion is allowed to the operator and with careless workmen partially exhausted material containing an excess of oil may be removed from the machines at too early a stage of operation and secondly the fact that it is impossible to obtain cold drawn castor oil from the treatment of castor seed in this type of equipment."

Expellers :—

These are imported from America and England. The normal make is that manufactured by Messrs. V. D . Anderson & Co., Cleveland, Ohio, U.S.A., Ruston expellers are also used. There are also Dawes and Lahore expellers manufactured in India which are used by some mills in the Province. The preparatory machinery for expellers is more elaborate than in the case of ghanis or rotaries. There are, for instance, disintegrators, cooking heaters, cake forming machinery, re-grading, re-heating, re-pressing machinery, etc. For crushing oil seeds with an oil content of more than 35 per cent. normally double mechanical pressure is applied. After processing the raw material by heating, cleaning, etc., it is treated in the perforated or ribbed barrel in the steel cage where hardened steel worms are arranged on a shaft which by revolution press the material. The partially exhausted material is afterwards ground, heated, moistened and re--pressed yielding hot drawn oil in addition to the cold drawn oil by the first pressure. The double pressure accounts for the higher extraction yield in expellers which is normally 42 to 43 per cent. as compared to the extraction percentage of 38 or 39 per cent. in rotaries and maximum 40 per cent. in Haskell ghanis. The average crushing capacity of an expeller is 5 1/2 to 6 1/4 tons of oil seeds per working day of 24 hours consisting of three shifts of eight hours each. Whereas in Bombay expellers work for 300 days with a working day of 24 hours, in the districts some mills work the expellers for only eight hours a day for 200 days. This is due to occasional inadequacy of diesel oil, temporary running out of seed stock etc. The average cost of two expellers and mortars pumps, etc. needed for these with buildings for storage of machinery and raw materials and finished products is roughly Rs. 1 lakh and the average cost of oil seeds is Rs. 1 lakh per year.

The oil produced by expellers is filtered and refined. Otherwise, with storage it is liable to rancidity and deterioration. Even when produced by cold pressure, vegetable oils contain moisture and mucilaginous material which if not removed leads to hydrolysis and decomposition of neutral glycerides. The chief impurities are dirt and solid matter from seeds, mucilage, free fatty acids, colouring matter, substances imparting taste and smell to the oil and moisture. Refining means the elimination of these impurities from neutral oils. Mill oils are bleached with animal charcoal or fuller's earth or bleaching earth. They are also deodorised and hydro-genated for the manufacture of vegetable ghee, tallow, etc. The refining process is more elaborate than in the case of ghanis and the rotaries. Soap, glycerine, lubricants, hair oils, candles, paints and varnishes apart from edible oil and oil cake, are also produced.

The oil is packed in barrels for sale. Small retail sales up to seven barrels to one person are made in Bombay by the Bombay mills. The purchasers of these barrels are technically wholesalers because they sell further to retailers who sell in small quantities to the consuming public. As far as the mills are concerned it is practically retail sale up to quantities of seven to eight barrels. Upcountry oil despatched in tank wagons is cheaper sometimes than the Bombay mill oil. But some wholesalers are unable to buy the large quantity in bulk contained in tank wagons and have, therefore, to turn to the Bombay mills locally for small quantities in seven to eight barrels. The mills can, therefore, sell this oil at a slightly higher rate than tank wagon oil. Due to the cost of transport it is not possible for mills in Bombay City to compete with mofussil mills. The tendency is for mofussil mills to invade the Bombay market armed with a relatively cheaper cost of production. Mofussil mills, needless to say, compete with ghani oil in the districts with greater ease than with the oil of Bombay City mills.

Solvent or Chemical Extraction

This is done by percolating the chemical solvent, benzine or carbon bisulphide through the ground seed material. The solvent mixture is afterwards distilled and the solvent condensed and used again while the oil is recovered and treated to eliminate traces of the solvent. The percolation takes place in a single tank or a battery system. The cost of a plant for solvent extraction with a capacity of 50 tons with four expellers to grind the material is roughly, we are told, Rs. 7 lakhs to Rs. 8 lakhs.

One objection to this method is that as the percentage of extraction is very high, something like 98 to 99 percent., the residue is practically useless as cattle food and at best is only fit for manure. Secondly it is difficult to eliminate entirely all traces of the solvent and this makes the oil unfit for edible purposes and fit only for industrial uses, e.g., soap making etc. We understand that there are only two factories working in India employing the solvent extraction method on a commercial scale, viz., the Indian Oil Products, Ltd., Calcutta, and a firm at Kalyan, Bombay. For all practical purposes, chemical extraction of edible oils may be ruled out so far as our report is concerned.

Hydraulic presses :—

As opposed to the mechanical pressure used in rotaries and expellers, hydraulic presses work on hydraulic pressure. They have the same elaborate preparatory technique and are generally more cumbersome, costly and require more expert attendance,

APPENDIX I.

Table of five year programme to cover 10,000 ghanis showing funds required and the rate of the Cess on oil seeds and copra crushed in mills.

1.		1st	2nd	3rd	4th	5th
2.	No. of ghanis.	2,000	4,000	6,000	8,000	10,000
3.	No. of Co-operative Societies	100	200	300	400	500
		Rs.	Rs.	Rs.	Rs.	Rs.
4.	Grant of management expenses to col. 3.	60,000	1,20,000	1,80,000	2,40,000	3,00,000
5.	Loans for equipment	12,00,000	24,00,000	36,00,000	48,00,000	60,00,000
6.	Loans for godowns	20,00,000	40,00,000	60,00,000	80,00,000	1,00,00,000
7.	Loans for working capital	70,00,000	1,40,00,000	2,10,00,000	2,80,00,000	3,50,00,000
8.	Loans for transport vehicles.	1,00,000	2,00,000	3,00,000	4,00,000	5,00,000
9.	Interest free value of cols. 5, 6, 7 and 8 (roughly as it does not take into account repayments spread over different terms).	3,09,000	6,18,000	9,27,000	12,36,000	15,45,000
10.	Bonus for oil produced.	13,50,000	27,00,000	40,50,000	54,00,000	67,50,000
11.	Total of cols. 4 + 9 + 10	17,19,000	34,38,000	51,57,000	68,76,000	85,95,000
12.	Funds from registration and licence fee and Government of India Cess on mill oil.	1,32,563	1,32,563	1,32,563	1,32,563	1,32,563
13.	Other net funds required (11—12)	15,86,437	33,05,437	50,24,437	67,43,437	84,62,437
14.	Cess per ton on oil seeds and copra crushed in mills.	Rs. 3-0-0	Rs. 6-3-0	Rs. 9-7-0	Rs. 12-13-0	Rs. 16-0-0 to Rs. 17-8-0

Note.—(1) The figures mentioned for years 2, 3, 4 and 5 shows total outstanding loans advanced apart from periodical repayments.

(2) Figures in column 14 are calculated on the basis of an assumed annual crushing capacity of 5,33,554 tons in expellers and rotaries in Bombay Province.